

Exhibit 21

1 SUPERIOR COURT OF THE STATE OF CALIFORNIA

2 COUNTY OF ALAMEDA

3 BEFORE THE HONORABLE FRANK ROESCH

4 DEPARTMENT 17

5 ---000---

6 PATRICIA SCHMITZ,

7 Plaintiff,

8 vs.

No. RG18923615

9 JOHNSON & JOHNSON, et
10 al.,

Defendants.

11 _____/

12 REPORTER'S TRANSCRIPT OF PROCEEDINGS

13 (William Longo, Ph.D.)

14 Tuesday, April 30, 2019

15 Full Session

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19 Taken before EARLY K. LANGLEY
20 RMR, RSA, B.A.
CSR No. 3537

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P R O C E E D I N G S

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Tuesday, April 30, 2019 - 8:44 a.m.

(Morning Session)

(Whereupon, the following proceedings were held outside the presence of the jury:)

THE COURT: On the record.

This is Schmitz v. Johnson & Johnson and Colgate.

If I might impose on the lawyers to state your names for the record.

MR. SATTERLEY: Good morning, Your Honor. Joe Satterley for the plaintiff.

MS. CLANCY: Good morning, Your Honor. Denyse Clancy for the plaintiff.

MR. CALFO: Good morning, Your Honor. Alexander Calfo for the Johnson & Johnson defendants.

MR. BATTLE: Good morning, Your Honor. Mike Battle for the Johnson & Johnson defendants.

MR. GARY SHARP: Good morning, Your Honor. Gary Sharp and Pete Mularczyk.

MR. ANDREW SHARP: Good morning, Your Honor. Andrew Sharp for Colgate.

THE COURT: All right. Counsel had an

1 agreement about one document and we're just going to
2 put that into evidence.

3 What number is it?

4 MR. SATTERLEY: Well, Your Honor, so the record
5 is perfected, what we're moving into evidence is all
6 the Scala documents, and they have objections to
7 several of them. So.

8 THE COURT: We're only going to deal with
9 Number 3611 at this point in time.

10 MR. SATTERLEY: But the ones they didn't object
11 to, Your Honor, there's some testing documents in the
12 ones they don't object to that I would typically use.

13 THE COURT: All right.

14 MR. SATTERLEY: So if I could go ahead and seek
15 admission of all the Scala documents to which they do
16 not object and I can identify for the record those
17 numbers.

18 THE COURT: I had forgotten that there was a
19 lot of numbers. The list that I had was only the
20 contested ones.

21 MR. SATTERLEY: So there's no objection to 3571
22 which was Exhibit 4 to Scala.

23 THE COURT: Mr. Bir, are you getting these?

24 MR. GARY SHARP: No objection, Your Honor.

25 MR. SATTERLEY: There's no objection to 3572,

1 which was Exhibit 5 to the Scala deposition. We'll put
2 Exhibit 6 to the side; we still need to resolve that
3 one. Put Exhibit 7 to the side; we still need to
4 resolve that one.

5 So let me just move forward to the next one
6 where there's no objection.

7 That would be Exhibit 16, which is
8 Exhibit 3583. There's no objection to 3583.

9 MR. GARY SHARP: No objection, Your Honor.

10 MR. SATTERLEY: There's no objection to 3584,
11 which is Exhibit 17 to Scala's deposition.

12 THE COURT: We'll get them all at once.

13 MR. SATTERLEY: There's no objection to 3585,
14 which is Exhibit 18.

15 THE COURT: Just give me the numbers.

16 MR. SATTERLEY: 3586.

17 3587.

18 MR. MULARCZYK: I'm sorry. Could we do it by
19 the Scala deposition number. That's how we have it
20 listed.

21 THE COURT: Mr. Satterley, you're going to have
22 to give me both numbers.

23 MR. SATTERLEY: I'll go back to Exhibit 19,
24 which was 3586.

25 Exhibit 20 is 3587.

1 Exhibit 24, which is 3591.

2 Exhibit 31, which is 3598.

3 Exhibit 35, which is 3602.

4 Exhibit 38, which is 3605.

5 Exhibit 39, which is 3606.

6 Exhibit 40, which is 3607.

7 Exhibit 41, which is 3608.

8 Exhibit 43, which is 3610.

9 And the one that I think counsel just indicated
10 they're going to withdraw their objection is 3611,
11 which is Scala Exhibit 44.

12 Exhibit 45 is 3612.

13 Exhibit 46 is 3613.

14 Exhibit 47 is 3614.

15 We seek the admission of each of those at
16 this -- at the time, Your Honor.

17 THE COURT: All right. As soon as Mr. Sharp
18 and Mr. Mularczyk are ready, we'll hear from them.

19 Do you stipulate all of those into evidence?

20 MR. GARY SHARP: Yes, Your Honor.

21 THE COURT: All right. Mr. Calfo.

22 MR. CALFO: Yes, Your Honor.

23 THE COURT: Have you any objection to any of
24 those exhibits?

25 MR. CALFO: No, Your Honor.

1 THE COURT: All right. So the record is
2 accurate, these are the exhibits that are being
3 admitted into evidence:

4 3571, 3572, 3583, 3584, 3585, 3586, 3587, 3591,
5 3598.

6 3602, 3605, 3606, 3607, 3608, 3610, 3611, 3612,
7 3613, and 3614.

8 Those are all in evidence.

9 (Whereupon, Plaintiff's Exhibit 3571 was
10 received into evidence.)

11 (Whereupon, Plaintiff's Exhibit 3572 was
12 received into evidence.)

13 (Whereupon, Plaintiff's Exhibit 3583 was
14 received into evidence.)

15 (Whereupon, Plaintiff's Exhibit 3584 was
16 received into evidence.)

17 (Whereupon, Plaintiff's Exhibit 3585 was
18 received into evidence.)

19 (Whereupon, Plaintiff's Exhibit 3586 was
20 received into evidence.)

21 (Whereupon, Plaintiff's Exhibit 3587 was
22 received into evidence.)

23 (Whereupon, Plaintiff's Exhibit 3591 was
24 received into evidence.)

25 (Whereupon, Plaintiff's Exhibit 3598 was

1 received into evidence.)

2 (Whereupon, Plaintiff's Exhibit 3602 was
3 received into evidence.)

4 (Whereupon, Plaintiff's Exhibit 3605 was
5 received into evidence.)

6 (Whereupon, Plaintiff's Exhibit 3606 was
7 received into evidence.)

8 (Whereupon, Plaintiff's Exhibit 3607 was
9 received into evidence.)

10 (Whereupon, Plaintiff's Exhibit 3608 was
11 received into evidence.)

12 (Whereupon, Plaintiff's Exhibit 3610 was
13 received into evidence.)

14 (Whereupon, Plaintiff's Exhibit 3611 was
15 received into evidence.)

16 (Whereupon, Plaintiff's Exhibit 3612 was
17 received into evidence.)

18 (Whereupon, Plaintiff's Exhibit 3613 was
19 received into evidence.)

20 (Whereupon, Plaintiff's Exhibit 3614 was
21 received into evidence.)

22 MR. SATTERLEY: With this witness we've met and
23 conferred; we have some agreements regarding
24 admissibility of exhibits with the -- prior to
25 Dr. Longo's testimony.

1 THE COURT: All right. Do you want to state
2 those?

3 MR. SATTERLEY: Yes, Your Honor. These are all
4 photographs that relates to the testing of the J&J, the
5 Colgate.

6 THE COURT: Just tell me the exhibit numbers.

7 MR. SATTERLEY: Yes, Your Honor.

8 1065, 1080, 1081, 1082, 1083, and 1084, 1091,
9 1092, 1093, 1096, 1097, 1098.

10 Should be a total of 12 exhibits. I have them
11 for Your Honor in binders organized. I provided them
12 to counsel both electronically and a hardcopy. It's my
13 understanding there's no objection with the exception
14 of J&J has objections to photographs of the J&J bottle
15 that accompanies the -- each -- they don't have
16 objection for demonstrative purposes, but they don't
17 want the actual photograph of the bottle to be received
18 into evidence.

19 THE COURT: Is the photograph part of the
20 exhibit?

21 MR. SATTERLEY: Yes. It is, Your Honor.

22 THE COURT: How can I accept part of an exhibit
23 into evidence?

24 MR. SATTERLEY: I wanted to resolve that issue
25 with Your Honor, show Your Honor the exhibit.

1 THE COURT: All right.

2 MR. SATTERLEY: And I've tendered to
3 Your Honor --

4 THE COURT: Which number --

5 MR. SATTERLEY: This is 1080, Exhibit 1080, if
6 you go behind Tab Number 1. Tabs 2 through 11 there's
7 no objections to. Tab 1. Tab 1 is -- and what
8 occurred here, Your Honor, is J&J produced these
9 photographs in response to discovery under -- behind
10 Tab 1.

11 And these were the actual bottles that
12 Dr. Longo, the samples came from. And so, for example,
13 to put in context, if we could go to the fourth
14 photograph on page 4 of 1080, you'll see that J&J has
15 marked the date of the product, and so this is
16 important evidence for the jury to consider in context
17 of the sample that's being analyzed, and many of these
18 bottles have the dates on them and J&J provided those
19 dates -- provided these bottles to us exactly in this
20 fashion.

21 So it puts context on the date of the sample in
22 question. And these are the historical.

23 So like I said, all the photographs behind
24 Tabs 2 through 11, there's no objection to. That's the
25 testing -- the photographs of the actual test.

1 THE COURT: So what you're telling me is that
2 there's more than one bottle that is pictured?

3 MR. SATTERLEY: That's --

4 THE COURT: And these are the bottles that the
5 samples that Longo tested actually came in.

6 MR. SATTERLEY: Came from.

7 THE COURT: Came from.

8 MR. SATTERLEY: Because J&J's labs made the
9 sample splits and then with the chain of custody said
10 this is the sample you're getting and --

11 THE COURT: I understand. I'm just asking
12 questions here. And the writing on the -- the typed
13 writing that's taped to one bottle, for example, is
14 something that was written by Johnson & Johnson and
15 taped on to the bottle by Johnson & Johnson.

16 MR. SATTERLEY: That's the way that it was
17 produced in the course of discovery, Your Honor.

18 THE COURT: So if you ask your witness, Longo,
19 do you recognize these and he's going to say that's
20 exactly how I got them from Mr. Satterley.

21 MR. SATTERLEY: The samples were not received
22 in the bottles themselves. The samples -- J&J's own
23 lab took the samples and gave us the sample numbers.
24 You can see it says "JPBP" -- it's got a number of 188
25 or 093, and the chain of custody document matches up so

1 the dates are matched up, and he can explain that
2 through the chain of custody process.

3 But this just gives the context to the dates.

4 Counsel advised me they have no objection to
5 demonstrative for these. At the very least, I'd like
6 to demonstrate some of these, but I think they're
7 actually -- should come into evidence so the jury can
8 evaluate the dates of the various samples as
9 represented by J&J.

10 THE COURT: All right.

11 Ms. Steinmann, you're standing there.

12 MS. STEINMANN: Your Honor.

13 THE COURT: I presume that you're going to tell
14 me what the objection is.

15 MS. STEINMANN: The objection is just that
16 these aren't evidence of anything in this case.
17 Dr. Longo is going to be able to tell the jury what the
18 dates were and there is no reason to put in 99 photos
19 of different Johnson & Johnson bottles. It's not
20 evidence of anything. Demonstrative-wise I agree --

21 THE COURT: That's not an evidentiary
22 objection. Maybe it's a -- maybe the argument is 352
23 cumulative. But the concept that they don't need to is
24 not --

25 MS. STEINMANN: Sorry, Your Honor. Formal

1 objection --

2 THE COURT: They have to -- they get to put on
3 their case.

4 MS. STEINMANN: Formal objection is 352. I was
5 just explaining the reasons for our objection, which is
6 I believe these are fair for a demonstrative, but I
7 don't think they have any relevance to go back to the
8 jury. And she didn't use those bottles, and we just
9 don't want the jury to get the misimpression that all
10 of these bottles came from Mrs. Koretoff --
11 Mrs. Schmitz, I'm sorry.

12 THE COURT: Okay. If that's the objection,
13 it's overruled.

14 MS. STEINMANN: Thank you, Your Honor.

15 THE COURT: So what number is that exhibit?

16 MR. SATTERLEY: That's 1080.

17 THE COURT: All right. The following
18 exhibits -- other than that one, do you stipulate that
19 all the rest of the list that was read by Mr. Satterley
20 may be admitted into evidence?

21 MS. STEINMANN: Your Honor, I believe I was
22 walking in, but if it's what he said to me --

23 THE COURT: I'll read it to you, if you'd like.

24 MS. STEINMANN: Okay.

25 Is this it?

1 MR. SATTERLEY: I provided hardcopies to -- to
2 all counsel. These are the J&J's and Colgate is right
3 there.

4 MS. STEINMANN: Just give me one second to get
5 through them.

6 THE COURT: Of course.

7 MS. STEINMANN: Yes, Your Honor. This appears
8 to be what was sent to us and we did stipulate to
9 these.

10 THE COURT: All right. Mr. Sharp, have you any
11 objection to any of these exhibits?

12 MR. GARY SHARP: No, Your Honor.

13 MR. MULARCZYK: Your Honor, I just have one
14 objection. I'm sorry. Are we talking about the
15 Johnson & Johnson ones or the ones pertaining to
16 Colgate?

17 THE COURT: Yes. We're talking about the 1065
18 through 1098 list that was read into the record by
19 Mr. Satterley.

20 MR. MULARCZYK: So the only objection that I
21 have -- I'm okay with all the photographs. The one
22 objection I have is a document here. It's a chain of
23 custody document. It's 1096. And my objection is that
24 this contains a list of samples that aren't at issue in
25 this case and that Dr. Longo is not relying on.

1 So.

2 MR. SATTERLEY: Are you talking about this list
3 right here?

4 MR. MULARCZYK: Correct.

5 THE COURT: What number?

6 MR. MULARCZYK: There's a whole host of samples
7 that are not subject to this case at all in this list.
8 This is 1096.

9 THE COURT: I understand, but in this binder
10 what tab is it?

11 MR. SATTERLEY: Your Honor, you don't have the
12 correct binder right there. 1096. If I could tender
13 it to the Court. It's in the second box.

14 This is the first I'm hearing of this
15 objection, but I can agree if they don't cross-examine
16 on -- that he didn't test these other 43 bottles -- or
17 41 bottles, I will agree to redact that and only put
18 the ones -- the bottles that he did test. What
19 occurred -- well -- and that's my offer is, as long as
20 they don't cross-examine on those other bottles that
21 were not tested, I have no problem redacting this
22 document and making it only the bottles that were
23 tested.

24 THE COURT: All right. So we'll redact the
25 bottles that weren't tested.

1 MR. SATTERLEY: Yes.

2 THE COURT: That sounds like a perfectly good
3 way of approaching the problem.

4 MR. SATTERLEY: Yes, Your Honor.

5 MR. MULARCZYK: Thank you, Your Honor.

6 THE COURT: Okay. So, for the record, the
7 following exhibits are admitted into evidence:

8 1065, 1080, 1081, 1082, 1083, 1084, 1091, 1092,
9 1093, 1097, 1098.

10 (Whereupon, Plaintiff's Exhibit 1065 was
11 received into evidence.)

12 (Whereupon, Plaintiff's Exhibit 1080 was
13 received into evidence.)

14 (Whereupon, Plaintiff's Exhibit 1081 was
15 received into evidence.)

16 (Whereupon, Plaintiff's Exhibit 1082 was
17 received into evidence.)

18 (Whereupon, Plaintiff's Exhibit 1083 was
19 received into evidence.)

20 (Whereupon, Plaintiff's Exhibit 1084 was
21 received into evidence.)

22 (Whereupon, Plaintiff's Exhibit 1091 was
23 received into evidence.)

24 (Whereupon, Plaintiff's Exhibit 1092 was
25 received into evidence.)

1 (Whereupon, Plaintiff's Exhibit 1093 was
2 received into evidence.)

3 (Whereupon, Plaintiff's Exhibit 1097 was
4 received into evidence.)

5 (Whereupon, Plaintiff's Exhibit 1098 was
6 received into evidence.)

7 (Whereupon, Plaintiff's Exhibit 1096 was marked
8 for identification and provisionally admitted
9 after redaction.)

10 THE COURT: 1096 is provisionally admitted, but
11 the actual document will be redacted after testimony of
12 the witness who will itemize the ones that he actually
13 tested.

14 That means that you can't show that one on the
15 screen.

16 MR. SATTERLEY: Yes, Your Honor. We have three
17 additional stipulations with regards to demonstrative
18 evidence. And this is Exhibits 1046, 1047, and 1099.

19 1046 is a NIST standard, and I don't believe
20 there's any objection --

21 For demonstrative purposes only; correct?

22 MR. CALFO: Correct.

23 THE COURT: All right. So 1046 won't be
24 admitted into evidence, but you may show it on the
25 screen.

1 (Whereupon, Plaintiff's Exhibit 1046 was marked
2 for identification.)

3 MR. SATTERLEY: Yes, Your Honor.

4 MR. MULARCZYK: Well, we have an objection to
5 that one specifically for all purposes. I didn't have
6 an objection to the animation that he proposed, but I
7 did have an objection to that for all purposes. It
8 wasn't something that was disclosed in this case, it
9 wasn't something that was referenced as reliance
10 material in his deposition, and so for that reason it
11 shouldn't be permitted in this case.

12 THE COURT: All right. So it's a demonstrative
13 tool.

14 MR. SATTERLEY: Yes, just demonstrative,
15 Your Honor. We're not seeking its admission.

16 THE COURT: All right. What is it?

17 MR. SATTERLEY: It's just -- it's a tremolite.
18 The NIST -- NIST is the National Institute for
19 Standards and Technology, and this shows what tremolite
20 the standard is.

21 THE COURT: Is that the image that you're
22 showing me there that I can see from here?

23 MR. SATTERLEY: Pardon?

24 THE COURT: No, no. I can see it from here.
25 Oh, it's not just one page.

1 MR. SATTERLEY: It is, I think, three pages and
2 it shows what under the microscope the standard of
3 tremolite is, and all Dr. Longo does is says -- gives
4 an opinion that he has -- that he's -- his lab took
5 these photographs.

6 THE COURT: All right. I'll allow it as a
7 demonstrative. I won't allow it into evidence.

8 MR. SATTERLEY: And the heavy liquid separation
9 animation is 1046 is what I showed in opening
10 statement. Counsel advised me they have no objection
11 to it for demonstrative purposes only the animation of
12 the heavy liquid separation, as 1047.

13 THE COURT: All right. That can be shown on
14 the monitor, but it won't be in evidence.

15 MR. SATTERLEY: Yes, Your Honor. And the final
16 is the 1990 advertisement in a magazine called *Asbestos*
17 *Issues*, June of 1990. And this is Exhibit 1099. And
18 it's --

19 No objection for demonstrative purposes?

20 MR. CALFO: No objection for demonstrative
21 purposes.

22 THE COURT: Mr. Mularczyk?

23 MR. SATTERLEY: The 1990 ad.

24 THE COURT: All right. Mr. Mularczyk is
25 shaking his head no.

1 MR. MULARCZYK: No objection, Your Honor, I'm
2 sorry.

3 THE COURT: All right, so that one also can be
4 shown to the jury, but it's not in evidence.

5 (Whereupon, Plaintiff's Exhibit 1047 was marked
6 for identification.)

7 (Whereupon, Plaintiff's Exhibit 1099 was marked
8 for identification.)

9 MR. SATTERLEY: While I'm meeting and
10 conferring with Mr. Calfo, Ms. Clancy has a few issues
11 that she may want to raise.

12 MS. CLANCY: Ms. Steinmann.

13 MS. STEINMANN: I'm sorry, but, Your Honor, we
14 were sent a grouping of exhibits early this morning,
15 and they also just were nice enough to provide me a
16 copy, but I'm still going through them as we've been
17 talking, so I'm not prepared to address these yet.
18 We've just got them this morning, so.

19 MS. CLANCY: These were all documents to which
20 Johnson & Johnson responded to an RFA saying that they
21 kept them in the ordinary course of business, and so at
22 the time they were created, I didn't anticipate there
23 would be, well, actually an objection to them. So if
24 we could just take two minutes to allow Ms. Steinmann
25 to look at the documents.

1 THE COURT: Are you going to be using them with
2 this witness?

3 MS. CLANCY: Yes, Your Honor.

4 THE COURT: All right. Well, let's take a
5 minute and take a look at it. We'll take a short
6 recess.

7 MS. CLANCY: Thank you, Your Honor.

8 MR. MULARCZYK: When this issue is resolved, I
9 don't know if the Court remembers, but we still had a
10 motion in limine on this witness, and -- with the full
11 expectation that this Court is not going to turn around
12 this witness and send him home, I just would ask for a
13 few minutes so we can address it and we just have a
14 ruling on it before we move forward.

15 THE COURT: All right.

16 While Ms. Steinmann is looking at all those
17 documents, we are going to Amotion in limine. It is
18 Motion in Limine -- Joint Motion in Limine Number --
19 I've forgotten the numbers -- like, 7 or 8, or
20 something. It's Number 1 --

21 MR. MULARCZYK: It's 3A.

22 THE COURT: Well -- oh, it's -- oh --

23 MR. MULARCZYK: It's -- it's Colgate's Motion
24 in Limine 3A.

25 THE COURT: Yes, there you go. It was also

1 Whitaker, Clark & Daniels' motion.

2 And by the way, I -- I want to point out to you
3 that on Exhibit 23 to the Scala deposition, where it
4 says "F. Roesch, R-o-e-s-c-h, at the top in what
5 appears to be maybe even my handwriting, that's not my
6 handwriting. And I am no relation to Fred Roesch.

7 MR. GARY SHARP: It is spelled differently.

8 THE COURT: No, it's not.

9 MR. GARY SHARP: I thought it was R-o-a-c-h.
10 Exhibit 23, Your Honor?

11 THE COURT: Yes.

12 MR. SATTERLEY: As I was reading through the
13 document the other day, I was thinking, "I wonder if
14 he's related."

15 THE COURT: All right. I have this motion
16 actually as Motion in Limine Number 2 of
17 Colgate-Palmolive.

18 MR. MULARCZYK: Oh, okay. All right.

19 MS. CLANCY: Isn't that the one he already
20 ruled on, Number 2?

21 MR. MULARCZYK: We never argued this one.

22 MS. CLANCY: We argued one motion in limine for
23 you on Dr. Longo on -- on chain of custody.

24 MR. MULARCZYK: So there was one on samples,
25 and there was on Longo. Two separate motions.

1 MS. CLANCY: Correct.

2 I think -- I think, Your Honor, where -- I'm a
3 little confused, because we argued one on the
4 authenticity of the samples, and then they filed
5 another motion also alleging authenticity of the
6 samples and -- and other of what -- Dr. Longo's
7 opinions. I just want to make sure I'm responding to
8 the correct one, because the Court has already ruled on
9 the one with regard to authenticity of the samples.

10 THE COURT: This is -- it's -- it's this motion
11 right here, this --

12 MS. CLANCY: What is -- what is the --

13 THE COURT: I would say that's nine inches of
14 Colgate --

15 MS. CLANCY: The 9-inch motion? Well,
16 unfortunately, that doesn't differentiate it from other
17 any of Colgate's other motions, so --

18 THE COURT: This is -- this is the biggest one.

19 MS. CLANCY: Oh, the biggest one. What's the
20 title of it?

21 THE COURT: Plaintiffs' -- it is Defendant
22 Colgate-Palmolive Company's Motion in Limine to Exclude
23 Testimony of Plaintiff's Expert Dr. William Longo
24 Regarding Unreliable Testing Performed on Undisclosed,
25 Unauthenticated Containers of Cashmere Bouquet.

1 MS. CLANCY: I think that's the one that the
2 Court has already ruled on, but --

3 THE COURT: My note shows that it's passed.

4 MS. CLANCY: Okay. All right. Well --

5 THE COURT: You may be confusing it with the
6 Egilman motion.

7 MR. MULARCZYK: Your Honor, there was one about
8 the authenticity of the samples themselves.

9 THE COURT: That was --

10 MR. MULARCZYK: It was Joint -- it was Joint
11 Defense, I think, Motion in Limine Number 1, maybe, or
12 Colgate Number 1.

13 THE COURT: All right. Well, go ahead,
14 Mr. Mularczyk.

15 MR. MULARCZYK: All right. So since -- since
16 this motion is fresh in your mind, Your Honor --

17 THE COURT: I must confess that while I read
18 the motion, I didn't look at all the exhibits.

19 MR. MULARCZYK: And I don't blame you.

20 So this is -- this is a really focused motion.
21 Generally speaking, I don't have a concern with
22 Dr. Longo speaking about the testing that he personally
23 did, but where it becomes problematic is when he
24 attempts to extrapolate from his own handful -- subset
25 of testing that he's done to try to say whether or not

1 what the plaintiff used was contaminated and at what
2 levels specifically.

3 There is an opinion that he has specifically
4 within his -- within his declaration and that he
5 offered in his deposition, which is, basically, anybody
6 including Ms. Schmitz, who used Cashmere Bouquet at any
7 time would have been exposed to asbestos and at
8 significant levels or substantial levels.

9 And so, again, I've got no problem with him
10 coming in here and talking about the samples he's
11 tested. It's well within -- well within his realm.

12 But there is nothing that he has done
13 scientifically, whether it's some sort of analysis or
14 calculation, whether it be mathematical or statistical
15 or anything at all, that allows him to make the jump
16 from the small subset of samples that he has tested to
17 the -- to the entire product line or even to the
18 products that Ms. Schmitz used. There's simply nothing
19 there. Nothing at all.

20 And I think it's inappropriate to allow him to
21 do that under *Sargon*. I don't think he's demonstrated
22 that. And so if we're going to keep him to -- if we
23 are going to keep him in his lane and have him talk
24 about his samples that he has looked at personally, no
25 problem. But as soon as he makes that jump to what

1 Ms. Schmitz used and whether that's appropriate, I
2 think it's not, and I don't think it's supported.

3 THE COURT: All right. Does Johnson &
4 Johnson --

5 MR. CALFO: We join.

6 THE COURT: You concur with that?

7 MR. CALFO: Yes, Your Honor.

8 THE COURT: All right.

9 Ms. Clancy.

10 MS. CLANCY: Okay. Yes, Your Honor. So within
11 the nine inches of exhibits that Colgate attached, I'm
12 assuming that they attached Dr. Longo's report in this
13 case, where they stated that there were no scientific
14 calculations, no data, no math whatsoever to support
15 his opinions, and that's absolutely belied by his
16 report.

17 He's testified in his deposition -- and he
18 provided voluminous testing -- that not only has he
19 examined the actual samples of Cashmere Bouquet and
20 Johnson & Johnson --

21 THE COURT: Well, they're -- they're not saying
22 that. They're saying that he's incapable of opining
23 that because he found asbestos in the samples that he
24 looked at of the Colgate-Palmolive product, that --
25 that other bottles may have had asbestos in them, too.

1 MS. CLANCY: Yeah, sure. So he found in the
2 Colgate bottles, 100 percent contained asbestos.

3 THE COURT: 100 percent of the samples, not --

4 MS. CLANCY: Correct.

5 THE COURT: -- 100 percent of the bottles.

6 MS. CLANCY: And he also found -- went through
7 the Colgate historical documents, where Colgate found
8 asbestos in their samples.

9 He's also reviewed the mechanism of testing
10 that Colgate used in order to analyze whether or not it
11 had asbestos, which, as the Court heard yesterday and
12 as we heard from Scala, is the XRD method, which is
13 incapable of being sensitive to asbestos below a
14 certain level. 2 percent to 1 percent is the
15 scientific evidence.

16 And so, therefore, under *Lyons v. Colgate*, the
17 Court of Appeals expressly held that where you have an
18 expert who analyzed the sample at issue, who has
19 looked at the historical document, who has looked at
20 the testing samples, the testing that was used by the
21 corporation, to see that it was wholly deficient to
22 find whether there was asbestos there in the first
23 instance, that it is absolutely permissible for that
24 expert to say whether or not when the plaintiff
25 breathed -- that the plaintiff would have had

1 substantial exposure to asbestos by use of the product.

2 And that *Colgate v. Lyons* decision was
3 expressly found, especially in a situation where the
4 plaintiff had a lifetime use or it was for decades of
5 use of a product, that for the expert to say that it
6 would have been a substantial exposure upon use of the
7 product was permissible testimony.

8 Anything with respect to, "Well, you can't say,
9 because you didn't test her actual bottle that she
10 used," or "You can't say that literally every bottle
11 had asbestos in it because you couldn't test every
12 single bottle," that goes, the Court held -- went to
13 the weight and not the admissibility of that opinion.

14 The -- Dr. Longo in his report set forth the
15 careful calculations, where he analyzed each of
16 Ms. Schmitz' personal use exposures from each of the
17 products, calculating the number of grams in the
18 products, the amount of ounces used in her lifetime,
19 and the -- the resultant exposure that would have
20 ensued as a result of her use of the products.

21 This is square on with what the Court of
22 Appeals has held is admissible based on, actually,
23 Defendant Colgate's same objections in that case.

24 THE COURT: Mr. Mularczyk.

25 MR. MULARCZYK: So I guess I'll have to live

1 with the Lyons decision forever, but that was a summary
2 judgment case, okay, has no applicability to the issue
3 that we're raising here.

4 Let's make sure we understand what his
5 expertise is. He's a material scientist. He's an
6 analyst. He tests the products that are before him, or
7 his lab tests the products that they're looking at.
8 He's -- he's not an individual that has anything in his
9 background that allows him to make this statistical
10 leap about what Ms. Schmitz may have used and how often
11 and so forth.

12 He, himself, testified at his deposition that
13 the reason he gets from his subset of 58 samples to
14 what Ms. Schmitz used was because he took the number of
15 positives, divided it by the total number of samples he
16 tested, and says, "Well, that's the percentage. I'm
17 going to be a little bit conservative, because there's
18 some nondetects" -- and he tested some samples where he
19 found nothing, by the way -- and then he says, "I'm
20 going to take that percentage and apply it to the
21 universe of products."

22 That's -- that's not expertise, Your Honor. I
23 could do that for anything.

24 THE COURT: Well, you can -- it goes to the
25 weight, though. It goes not to admissibility.

1 The motion is denied.

2 All right. Are we ready to proceed?

3 MS. CLANCY: I just was going to find out
4 which --

5 THE COURT: Still on the record.

6 Ms. Steinmann is going to give us the word as
7 soon as she's ready.

8 Ms. Steinmann, how much more time do you need?

9 MS. STEINMANN: I -- I think I'm ready.

10 THE COURT: All right. I don't want to press
11 you. If you need a few more minutes, that would be
12 fine.

13 MS. STEINMANN: I'm done.

14 THE COURT: All right.

15 MS. CLANCY: Can I just look at which ones
16 you've --

17 MS. STEINMANN: Yes.

18 MS. CLANCY: May I meet and confer with her for
19 one minute, Your Honor?

20 THE COURT: Yes.

21 MS. CLANCY: Thank you.

22 (Counsel conferring at counsel table out of the
23 hearing of the reporter.)

24 MS. CLANCY: Your Honor, we have a stack of
25 agreed. If I could read into the record and then we

1 have a very small stack of disagreed.

2 THE COURT: All right.

3 MS. CLANCY: Agreed exhibits which plaintiffs
4 offer into evidence are Plaintiff's 640, 158, 155, 171,
5 174, 430, 660, 713, 752, and 172.

6 THE COURT: Ms. Steinmann, do you stipulate
7 those documents into evidence?

8 MS. STEINMANN: Yes, Your Honor.

9 THE COURT: Mr. Sharp? Mr. Mularczyk?

10 MR. MULARCZYK: Just subject to the same
11 objection regarding the applicability -- well, hearsay
12 as to Colgate and then the instruction that we
13 requested.

14 THE COURT: All right. Well, the hearsay as to
15 Colgate, which one? I mean, you know.

16 MR. MULARCZYK: My understanding is these are
17 all Johnson & Johnson documents, so all of them as
18 against Colgate.

19 THE COURT: Oh, all right. Well, it's just the
20 issue about that the jury can't take evidence of
21 malfeasance by Johnson & Johnson and attribute it to
22 Colgate?

23 MR. MULARCZYK: Correct.

24 THE COURT: Okay. You will get an instruction
25 on that. You'll just have to continue working it out.

1 MR. CALFO: Your Honor, we're both getting an
2 instruction; right?

3 THE COURT: Oh, yeah, yeah, yeah. It goes both
4 ways. It actually will be one -- it's all in one
5 instruction more likely than not.

6 All right. All of those exhibits are in
7 evidence. I'll read them for the record:

8 640, 158, 155, 171, 174, 430, 660, 713, 752,
9 and 172.

10 (Whereupon, Plaintiff's Exhibit 640 was
11 received into evidence.)

12 (Whereupon, Plaintiff's Exhibit 158 was
13 received into evidence.)

14 (Whereupon, Plaintiff's Exhibit 155 was
15 received into evidence.)

16 (Whereupon, Plaintiff's Exhibit 171 was
17 received into evidence.)

18 (Whereupon, Plaintiff's Exhibit 174 was
19 received into evidence.)

20 (Whereupon, Plaintiff's Exhibit 430 was
21 received into evidence.)

22 (Whereupon, Plaintiff's Exhibit 660 was
23 received into evidence.)

24 (Whereupon, Plaintiff's Exhibit 713 was
25 received into evidence.)

1 (Whereupon, Plaintiff's Exhibit 752 was
2 received into evidence.)

3 (Whereupon, Plaintiff's Exhibit 172 was
4 received into evidence.)

5 What documents are you offering that you do not
6 have agreement on?

7 MS. CLANCY: Sure. Should I -- there's just a
8 few, so should I take them one at a time -- and I want
9 to give an overarching change so there's one thing on
10 the table. For each of these, we're offering Johnson &
11 Johnson has responded to request for admission, in this
12 case stating that they -- the true and correct copy of
13 these -- these are true and correct copies and that
14 they were maintained in the ordinary course of business
15 of Johnson & Johnson.

16 THE COURT: So it's an admission that they're
17 business records?

18 MR. SATTERLEY: That's correct.

19 MS. CLANCY: So the -- then we'll get -- they
20 have objections on top of that.

21 So the first one is Document 724.

22 MR. SATTERLEY: I can address 724, Your Honor.
23 Their objection, I understand, is that this document
24 relates to industrial talc instead of cosmetic.

25 THE COURT: What is it?

1 MR. SATTERLEY: It's a McCrone letter to them
2 talking about the presence of amphiboles and asbestos,
3 fibers of asbestos in talc, in Vermont -- in the
4 Vermont mines where they were making baby powder with
5 this talc.

6 And they say this relates to industrial talc,
7 not cosmetic talc. But the testimony of Dr. Hopkins,
8 who the jury will hear, Your Honor has already ruled,
9 he says, and the other documents show, HC, the word
10 "HC" stands for Hammondsville cosmetic, and "HC" are --
11 is on the sample number on here quite a bit.
12 Your Honor has already overruled the general motion in
13 limine with regards to industrial talc or any reference
14 to industrial talc.

15 This, I think, falls squarely within that.
16 But, more importantly, it's going to be for the jury to
17 assess whether or not it's cosmetic talc like we claim
18 and like Dr. Hopkins admits through the documents that
19 HC stands for Hammondsville cosmetic or whether it's
20 industrial talc which that's their argument.

21 THE COURT: All right.

22 MS. STEINMANN: Your Honor, with respect to
23 that document, yes, we do dispute that HC, and
24 Dr. Hopkins also disputes it, that it is cosmetic talc.
25 He says it can be designated for industrial talc

1 including a specific document that says roofing
2 materials.

3 So we believe that that particular document
4 under 352 and relevance is not relevant to this case
5 and is also misleading and also requires us to have a
6 little minitrial of what HC actually means and what it
7 doesn't mean.

8 THE COURT: All right. I'll admit the document
9 into evidence. The objection is overruled.

10 Next one?

11 MS. CLANCY: That was 724.

12 THE COURT: 724 will be in evidence.

13 (Whereupon, Plaintiff's Exhibit 724 was
14 received into evidence.)

15 MS. CLANCY: The next one is 719.

16 MR. SATTERLEY: 719 is a letter from McCrone
17 once again to Windsor Minerals and it's signed by
18 Thomas Kremer and James Millette, and it's related to
19 1986. It's identification of chrysotile asbestos in
20 talc. We believe this is relevant to demonstrate that
21 chrysotile asbestos was actually found in the talc
22 samples. And there's been a lot of discussion about
23 McCrone and Dr. Millette, and there will be further
24 discussion about Thomas Kremer. And so we believe this
25 is relevant and important for the jury to understand

1 the identification of chrysotile as found in these
2 samples.

3 MS. STEINMANN: Your Honor, our response to
4 this is -- and I believe there's no dispute; there may
5 be, but -- this is specifically dealing with a mine in
6 California that cosmetic talc was never ever mined out
7 of, not for J&J or for any other company.

8 THE COURT: I think this was the Windsor mines?

9 MR. SATTERLEY: Windsor Minerals is not
10 California. Windsor Minerals is Vermont. It's Windsor
11 Minerals.

12 MS. STEINMANN: These testing results, as
13 Dr. Hopkins explains, are from a California western
14 mine.

15 THE COURT: Did Windsor mines have mines
16 outside of Vermont?

17 MS. STEINMANN: Johnson & Johnson only got
18 their talc from Vermont. I can't speak for Windsor
19 mines.

20 THE COURT: Okay. Well, you got to persuade me
21 that Windsor doesn't refer to the mines called Windsor
22 mines in Vermont before I can even really seriously
23 consider your objection.

24 MS. STEINMANN: Nowhere in here does it say
25 Windsor mines. It says "WMI," which is a designation

1 as Hopkins explains, which stands for this western mine
2 in California.

3 MR. SATTERLEY: Well, Hopkins, Your Honor, has
4 no basis whatsoever to explain away the document. The
5 document says Windsor Minerals. There's no Windsor
6 Mineral California talc mines that I've ever heard of.
7 So if that's their argument, that's an argument they
8 can make to the jury that that's not relating to this,
9 but there's certainly no documents to support that
10 argument.

11 THE COURT: All right. It seems that the
12 parties have different visions of what it actually
13 stands for. We'll let the jury decide it. 719 will be
14 in evidence.

15 (Whereupon, Plaintiff's Exhibit 719 was
16 received into evidence.)

17 MR. SATTERLEY: The next document is 726,
18 Your Honor. This is 2004 testing of Johnson & Johnson
19 Baby Powder by Forensic Analytical.

20 This was received by Johnson & Johnson at the
21 time. Forensic Analytical in Hayward, California
22 tested off-the-shelf baby powder, found asbestos in it,
23 anthophyllite asbestos. It was immediately -- this
24 report was transferred.

25 THE COURT: What's the objection?

1 MS. STEINMANN: Your Honor, this was testing
2 done by a new station. It was not done by the request
3 or at the request of Johnson & Johnson, and we believe
4 it has hearsay and is irrelevant.

5 THE COURT: Well, it's not a business record?

6 MS. STEINMANN: It is -- it was in our files.
7 It was sent to us.

8 MR. SATTERLEY: Your Honor, at the very least,
9 this goes to notice. We're going to hear who Mark
10 Floyd is today.

11 THE COURT: It only goes to notice. 726 will
12 be in evidence.

13 (Whereupon, Plaintiff's Exhibit 726 was
14 received into evidence.)

15 MR. SATTERLEY: Your Honor, Exhibit 163 is a
16 1971 document regarding their meeting with Dr. Langer
17 concerning analytical analysis of talc, and this shows
18 that -- this gives them knowledge that with regard to
19 fibrous minerals in 1971 were identified. It goes to
20 the fibrous content. It goes to asbestos, their
21 knowledge of asbestos in the product. In this 1971
22 document in their files it says Johnson's product he
23 estimated 5 percent, and the other 25 percent of the
24 particles to be fibrotic, some of which could be
25 asbestos.

1 I believe their objection is that it relates to
2 ovarian tissue, but at no point in this document do
3 they talk about ovarian cancer. They just talk about
4 the findings of talc and asbestos in ovarian tissue.

5 MS. CLANCY: Uterine tissue.

6 MR. SATTERLEY: Uterine tissue.

7 THE COURT: Ms. Steinmann.

8 MS. STEINMANN: Your Honor, a couple of things.
9 The document itself actually says "uterine tissue" on
10 the very first page. And this is, again, dealing with
11 the Tenovus study, which was solely directed at
12 studying uterine tissue for the development of ovarian
13 cancer and whether it was or was not caused by talcum
14 powder. That was the subject of an MIL, and we believe
15 that this document is irrelevant and misleading under
16 352.

17 THE COURT: Can I see the document?

18 MR. SATTERLEY: Yes, Your Honor. While I'm
19 handing the document to the Court, while Your Honor did
20 say ovarian cancer should not be discussed, this
21 document never talks about ovarian cancer.

22 THE COURT: Just let me read it. 163 will be
23 in evidence.

24 (Whereupon, Plaintiff's Exhibit 163 was
25 received into evidence.)

1 MR. SATTERLEY: The final -- the final
2 document --

3 MS. STEINMANN: Your Honor, if I could, if it
4 is coming into evidence, could we just ask -- ask that
5 the word "uterus" be redacted.

6 THE COURT: Oh, I don't think that that's so
7 prejudicial.

8 MR. SATTERLEY: And the final document,
9 Your Honor, relates to documents already been displayed
10 to the jury in the cross-examination of Alice Blount.
11 This is a 1998 letter from Alice Blount to the attorney
12 for Johnson & Johnson. It was authenticated by
13 Dr. Blount, and --

14 THE COURT: What number is it?

15 MR. SATTERLEY: This is Exhibit 160, and this
16 is April 23, 1998, where she identifies the --

17 THE COURT: I remember.

18 MR. SATTERLEY: -- sample.

19 THE COURT: I remember the testimony.

20 What's the objection to that?

21 MS. STEINMANN: Your Honor, foundation and
22 hearsay.

23 THE COURT: Oh, she looked at the letter and
24 said, I sent this to their lawyer. That will be
25 admitted into evidence. That's Number 160.

1 (Whereupon, Plaintiff's Exhibit 160 was
2 received into evidence.)

3 MS. STEINMANN: Your Honor, I also just want to
4 make sure, I believe that that had been sent with the
5 Blount records, so I want to make sure that there's not
6 duplicate copies being submitted. I didn't have a
7 chance to cross-reference --

8 MR. SATTERLEY: We won't put two copies of the
9 same things in evidence. We still have to address the
10 Blount documents later.

11 With that, Your Honor, we're prepared for the
12 jury to come in.

13 THE COURT: All right. Is there anything you
14 would like to raise, Mr. Calfo?

15 MR. CALFO: Nothing, Your Honor.

16 THE COURT: Nobody else is standing up. Let's
17 bring the jury in.

18 (Whereupon, the jury having entered the
19 courtroom, the following proceedings were held:)

20 THE COURT: Good morning, ladies and gentlemen.

21 THE JURY: Good morning.

22 THE COURT: Sorry to keep you waiting so long.
23 The record should reflect that all the jurors are in
24 their appropriate seats, counsel are present, and we're
25 ready to proceed.

1 We are not going back to the video. You're
2 going to see a witness this morning.

3 Would you please call your next witness,
4 Mr. Satterley.

5 MR. SATTERLEY: Yes. Good morning, Your Honor.
6 Good morning, ladies and gentlemen.

7 Dr. William Longo.

8 WILLIAM LONGO, Ph.D. (for the Plaintiff)

9 sworn as a witness,

10 testified as follows:

11 THE CLERK: Thank you, sir. Please take a
12 seat.

13 Could you please state your full name and spell
14 it for the record.

15 THE WITNESS: William Edward Longo, L-o-n-g-o.

16 THE COURT: Mr. Satterley, you may inquire on
17 direct examination.

18 MR. SATTERLEY: Thank you.

19 DIRECT EXAMINATION BY MR. SATTERLEY:

20 Q. Good morning, Dr. Longo.

21 A. Good morning.

22 Q. Have we requested you to come talk with the
23 folks here in Alameda County regarding your testing of
24 various talc products for the presence of asbestos?

25 A. Yes, sir, you did.

1 Q. And have we -- have you brought with you
2 photographic evidence of the testing and testing
3 results of what you found?

4 A. Yes, I did.

5 Q. Have I also asked you to analyze the case of
6 Patricia Schmitz with regards to her exposures, the
7 types of exposures she would have, to asbestos from
8 cosmetic talc products?

9 A. Yes. That's correct.

10 Q. Before we get to your specific opinions in this
11 case, let's talk a little bit about you and yourself.

12 Tell us, where did you go to college, college
13 forward as far as your education.

14 A. I went to the University of Florida. I
15 received a bachelor's of science in microbiology. I
16 went on to graduate school in material science and
17 engineering. I received a master's of science in
18 material science and engineering, and finished up in
19 1983 with a Ph.D. in material science and engineering.
20 All at the University of Florida.

21 Q. So when I call you "doctor," you're not a
22 medical doctor?

23 A. No, sir, I'm not.

24 Q. Tell us about material science. What is that?

25 A. It's an engineering field that literally is the

1 study of materials, and you can break these materials
2 down to approximately five groups.

3 Plastics or polymers, ceramics or minerals like
4 asbestos, metals, or metallurgy. And then composites
5 where you may have a polymer that has a metal content
6 of it where they mix two different things.

7 And then an area I spent a lot of time in, in
8 graduate school is biomaterials, things that are
9 implanted into the body like an artificial knee or a
10 hip replacement or an interocular lens if you have
11 cataract surgery.

12 And as a material scientist, we are taught and
13 learn all the properties of these different materials:
14 strength, weaknesses, ability to withstand corrosion or
15 not, and what are the right materials to use for any
16 particular type of engineering project. For example --
17 and I use this example a lot. If you're building a new
18 bridge, the new Bay Bridge that went up, a material
19 scientist would have been involved in that. And he
20 would be the go-between the civil engineer and the
21 mechanical engineer and the engineer who designed that
22 bridge.

23 What is the best concrete? What are the new
24 types of metal alloys that could be used that are
25 stronger, cheaper, better corrosion resistance. So a

1 material scientist would have been involved in most of
2 those aspects.

3 All your major semiconductor advances over the
4 years has been due to material scientists. I don't
5 know about now, but the CEO of Intel was a material
6 scientist at one point in the past.

7 So we understand where the products and
8 materials should be used, what kind of temperature --
9 strengths, temperature, resistance, et cetera. And
10 also as a material scientist, we -- they develop new
11 materials. Again, the semiconductor advances, the
12 ceramics on the -- that were developed for the space
13 shuttle, the -- even as simple as the changeover, if
14 your result is me, from the metal soda can to the
15 aluminum soda can. That was a material scientist who
16 came up with that particular aluminum/copper alloy,
17 mixture of two metals, to be able to make that into a
18 one-step process.

19 The last thing material that scientists do a
20 lot about is almost forensic engineering: What went
21 wrong? Is there a contaminant here? Why did this
22 break? What's in these ingredients that shouldn't be
23 in these ingredients? Say, a manufacturer is making
24 injection molding of these polyethylene plastic cups
25 and all of a sudden in the field they're not holding up

1 and they're leaking.

2 The material scientist could probably go in and
3 figure out where in that engineering molding process,
4 is it the right materials, is it the right polymer.
5 And that's what I do at my lab a lot, is the forensic
6 engineering side of things.

7 Q. So let me talk about your lab. You currently
8 have a lab of how many employees?

9 A. We have a lab in Suwanee, Georgia, and
10 currently I think we're up to about 46 employees.

11 Q. And what are the type of professionals work
12 with you in your lab, what type of scientists?

13 A. I have other material scientists like myself.
14 We have physicists. We have inorganic chemists;
15 organic chemists; microbiologists; industrial
16 hygienists; geologists; mineralogists; mechanical
17 engineering; physicists -- I think I may have said
18 that. I think that covers it. Oh, and electron
19 microscopist specialist; polarized light microscopist
20 specialist; and, of course, the support staff, the
21 admin people that really run the company.

22 Q. And with regards to asbestos, how long have
23 you -- have you been involved in the analysis for the
24 presence of asbestos?

25 A. Yes, sir, I have.

1 Q. For how long?

2 A. A little bit over 30 years.

3 Q. And with regards to asbestos issues, have you
4 made presentations or publications involving asbestos
5 or asbestos exposure?

6 A. I have.

7 Q. Have you tested many different products for the
8 presence of asbestos over the course of your career?

9 A. Yes, sir. Early years myself and also our lab.

10 Q. And approximately how many products or
11 specimens have you examined, you and your laboratory
12 examined, to determine whether asbestos is present or
13 not?

14 A. A large number of different types of products,
15 but just pure numbers of samples, our laboratory is
16 approaching close to 400,000 individual analysis of
17 samples, different samples for asbestos.

18 Q. And some of the testing and testing results
19 have you published in the peer-reviewed literature?

20 A. We have.

21 Q. And have you made presentations regarding your
22 findings of asbestos in some of the samples?

23 A. Yes, sir, we have.

24 Q. And with regards to your professional
25 organizations, what are some of the associations,

1 organizations you belong to?

2 A. The American Industrial Hygiene Association,
3 the Materials Research Society, the Microscopist
4 Society, the American -- I've said that already.
5 American Industrial Hygiene, the American Society of
6 Testing Materials, the Ceramics Society, Materials and
7 Methods Group. There's a number of them. Adjunct
8 member of the American Conference of Governmental
9 Industrial Hygienists. I'm not an American
10 Industrial -- a Governmental Industrial Hygienist, but
11 you can be an adjunct on to that. And also I am a
12 board certified forensic engineer.

13 Q. Now, with regards to industrial hygiene, you
14 said you're not a member of -- you're not a member of
15 the American Conference of Government Industrial
16 Hygienists?

17 A. No. I'm not a full member. You have to have
18 worked for the government to be an -- as an industrial
19 hygienist, but you can be an adjunct member so you can
20 get the information.

21 Q. Have you reviewed and studied the scientific
22 literature on industrial hygiene about asbestos over
23 the course of your career?

24 A. Yes, I have.

25 Q. And in developing your expertise as a forensic

1 engineer and material scientist, have you studied
2 exposures to asbestos that occur -- that individuals
3 have occurred historically?

4 A. I have.

5 Q. And have you reviewed those scientific
6 literature in that regard?

7 A. Yes, sir, I have.

8 Q. Do you, Dr. Longo, have specialized knowledge,
9 skill, and experience regarding exposures to asbestos
10 that folks have had based upon your review of the
11 scientific literature?

12 A. Yes, sir.

13 Q. Now, have you -- well, let me ask you about
14 your laboratory. Is your laboratory certified by any
15 organization?

16 A. It is.

17 Q. And what organization has certified your
18 laboratory?

19 A. We're certified by the American -- the American
20 Industrial Hygiene Association for analyzing asbestos
21 air samples. As well as asbestos bulk samples. We're
22 certified by the National Voluntary Laboratory
23 Accreditation Program for the analysis of asbestos by
24 transmission electron microscopy as well as bulk
25 samples by polarized light microscopy.

1 We're an International Standards Organization
2 certified for quality control, QC, as well as some
3 specialized testing, including water analysis for
4 asbestos. And we're also certified by 0 -- by ISO to
5 certify other laboratories that they follow a
6 particular type of analysis or protocol. And we're --
7 also we have -- we're registered laboratory for the --
8 for the FDA. So that we can analyze all types of
9 pharmaceutical-type materials from Schedule 2 on down.

10 We are certified by the DEA to handle those
11 types of products that come into the laboratory.
12 Again, Schedule 2 on down.

13 I guess that covers it, other than individual
14 certifications from groups that come in so that they
15 feel comfortable that when we do work or analysis for
16 them.

17 Q. What type of organizations have you consulted
18 with over the course of your career with regards to
19 testing materials including asbestos?

20 A. The FAA. We have consulted for the General
21 Services Administration, the Environmental Protection
22 Agency. NATO in Germany, when the Berlin Wall came
23 down, we were asked to analyze to see if that wall had
24 asbestos in it.

25 We have -- we have consulted for the Department

1 of Defense; for the U.S. Treasury; for National
2 Institutes of Health; for the CDC, Center for Disease
3 Control; and a number of companies outside this kind of
4 environment where we do problem-solving for them as
5 well as just regular analysis.

6 Q. Now, you're consulting at my request, me and
7 Ms. Clancy's request, in this case.

8 Have you done this in the past where you've
9 testified in cases involving injury and litigation?

10 A. Yes, I have.

11 Q. And have you testified at the request of
12 plaintiffs as well as the request of defendants in
13 litigation?

14 A. I have.

15 Q. I want to ask you about the ASTM D22. What is
16 that?

17 A. The American Society of Testing Materials is a
18 nonprofit organization, where most anybody can join,
19 and it is the largest group out there that develops
20 standards or testing for almost anything. There's
21 40- -- almost 40,000 members now.

22 And the D22 committee, is what I'm a member of
23 produces methods -- testing methods which, essentially,
24 is just a recipe, go from A to Z, so that labs can
25 standardize particular tests for analysis of different

1 types of matrices -- water, dust, et cetera -- for
2 asbestos.

3 Q. And how long have you been a part of the D22
4 committee or subcommittee?

5 A. Since approximately 1989 or so.

6 Q. And did you have any role in leading that
7 committee in the past or being part of leadership of
8 that committee?

9 A. Not leadership in the committee, but I was
10 tasked to being the shepherd or the person to push
11 through and write the test method for analyzing dust
12 for asbestos, building dust. The -- and I spent six
13 years doing that.

14 Q. Now, with regards to the tools that you use as
15 a material scientist for the identification of
16 asbestos, the jury has already heard last week from Lee
17 Poye about the transmission electron microscope. You
18 utilize that tool?

19 A. We do.

20 Q. How many TEMs do you have?

21 A. Currently, we have four.

22 Q. And how long have you had specialized
23 knowledge, skill, and experience in utilizing the
24 transmission electron microscope?

25 A. Over 30 years.

1 Q. The jury has heard about the scanning electron
2 microscope. Do you have a scanning electron
3 microscope?

4 A. We do.

5 Q. And how long have you utilized the scanning
6 electron microscope in your laboratory?

7 A. Over 30 years.

8 Q. The jury has heard about polarized light
9 microscopes. Do you have polarized light microscopes
10 in your lab?

11 A. We do.

12 Q. How many?

13 A. I think around 10.

14 Q. And how long has your laboratory utilized
15 polarized light microscopes historically?

16 A. Over 30 years.

17 Q. Will you -- do you have specialized knowledge
18 and experience in explaining what is seen under these
19 microscopes and what's identified and how they're
20 characterized? Will you be able to do that -- do that
21 today?

22 A. Yes, sir, I believe so.

23 Q. With -- specifically with regard to industrial
24 hygiene, you mentioned that you're a member of the
25 American Industrial Hygiene Association.

1 How much literature have you looked at with
2 regard to asbestos in terms of exposures over the
3 course of your career?

4 A. I think the number of published papers I've
5 reviewed has to be in the hundreds.

6 Q. And with regards to your analysis of exposures,
7 do you review and consider historical company
8 documents?

9 A. Yes, sir, I do.

10 Q. And specifically in this case, have you
11 reviewed and looked at some of the Johnson & Johnson
12 historical documents regarding asbestos issues?

13 A. Yes, I have.

14 Q. And have you specifically looked at some of the
15 Colgate documents regarding asbestos issues?

16 A. Yes, sir.

17 Q. And in some of these historical documents --
18 and we'll talk about them a little bit later -- are
19 there technical-type terms mentioned in some of them
20 that you can help explain some of these terms?

21 A. Yes, sir, I believe so.

22 Q. The jury's probably heard of some of them, but
23 we -- we may go through some -- some more of those.

24 I asked you about your organizations, and I
25 just want to make sure -- I don't know -- the National

1 Asbestos Council, were you a member of that
2 organization?

3 A. Yes, sir, I am.

4 Q. The Environmental Information Association, are
5 you a member of that organization?

6 A. Yes, sir, I am.

7 Q. The Electron --

8 A. The National Asbestos Council, that morphed
9 into the Environmental Information Association. So
10 that's really one group.

11 Q. Okay. I see.

12 And then the Electron Microscopy Society
13 association, are you member of that organization?

14 A. Yes, sir. Yes, sir.

15 Q. The Microbeam Analysis Society, are you a
16 member of that organization?

17 A. That, too.

18 Q. Are you a member -- have you been a member of
19 the New York Academy of Science?

20 A. I have been a member in the past.

21 Q. Have you been a member of the National
22 Institute of Building Sciences?

23 A. Yes, sir. I still am.

24 Q. Have you been a member of the Society for
25 Ultrastructural Pathology?

1 A. Yes, sir, I have been.

2 Q. And in the past, have some of the publications
3 that you've published and been the co-author been on
4 asbestos issues with pathologists?

5 A. Yes.

6 Q. Okay. Does your laboratory -- in addition to
7 looking at products, has your laboratory looked at
8 tissue, human tissue, for asbestos, the presence of
9 asbestos?

10 A. We have.

11 Q. The American College of Forensic Examiners, are
12 you a member of that organization?

13 A. Yes, sir. That's actually the one I'm board
14 certified in and now have been made -- been elected to
15 be a diplomat in that organization.

16 Q. And have you -- specifically with regard to
17 talc and exposures from talc, have you studied the
18 scientific literature from an exposure perspective to
19 form the basis of your opinions here today?

20 A. Yes.

21 MR. SATTERLEY: Your Honor, at this time, I
22 would offer Dr. Longo as an expert in material science,
23 asbestos testing, and exposure.

24 THE COURT: Mr. Calfo, do you wish to inquire
25 of this witness on his qualifications?

1 MR. CALFO: Your Honor, we'll reserve our
2 questioning for later.

3 THE COURT: Mr. Mularczyk?

4 MR. MULARCZYK: No questioning at this time,
5 Your Honor.

6 THE COURT: All right.

7 Ladies and gentlemen, this witness will be
8 certified as an expert in material science, forensic
9 engineering, testing for asbestos, and exposure to
10 asbestos.

11 During this trial, you will hear testimony from
12 expert witnesses. The law allows an expert to state
13 opinions about matters in his or her field of expertise
14 even if he or she does not witness any of the events
15 involved in the trial.

16 You do not have to accept an expert's opinion.
17 As with any other witness it is up to you to decide
18 whether you believe the expert's testimony and choose
19 to use it as a basis for your decision. You may
20 believe all, part, or none of an expert's testimony.

21 In deciding whether to believe an expert's
22 testimony, you should consider the expert's training
23 and experience, the facts that the expert relied on,
24 the reasons for the expert's opinion.

25 The law allows expert witnesses to be asked

1 questions that are based on assumed facts. These are
2 sometimes called hypothetical questions.

3 In determining the weight to give to the
4 expert's opinion that is based on assumed facts, you
5 should consider whether the assumed facts are true.

6 If expert witnesses disagree with one another,
7 you should weigh each opinion against the others. You
8 should examine the reasons given for each opinion and
9 the facts or other matters that each witness relied
10 upon. You may also compare the experts'
11 qualifications.

12 With that in mind, Mr. Satterley, you may
13 inquire on direct examination.

14 MR. SATTERLEY: Thank you, Your Honor.

15 BY MR. SATTERLEY:

16 Q. Dr. Longo, I'll jump to the -- your opinions
17 first. Then we are going to backtrack and go through a
18 lot of the bases for your opinions.

19 Do you have an opinion, Dr. Longo, based upon
20 everything you've looked at -- internal company
21 documents, historical documents, the scientific
22 literature, all the testing that you've done -- whether
23 or not Johnson & Johnson Baby Powder historically has
24 included asbestos as a part of it?

25 A. I do have an opinion.

1 Q. And what is your opinion?

2 A. That it does.

3 Q. Do you have an opinion, Dr. Longo, based upon
4 historical review of company documents, your review of
5 the scientific literature, your own -- your
6 laboratory's own testing of Cashmere Bouquet product,
7 whether the Cashmere Bouquet historically has included
8 asbestos as a part of it?

9 MR. MULARCZYK: Objection. Foundation.

10 THE COURT: It's overruled.

11 THE WITNESS: Yes, I do have an opinion.

12 BY MR. SATTERLEY:

13 Q. And what is your opinion?

14 A. That that product does.

15 Q. And with regards to this case, did you evaluate
16 Ms. Schmitz' exposure to those products, both Johnson &
17 Johnson Baby Powder and Cashmere Bouquet?

18 A. Yes, I did.

19 Q. And have you reviewed testimony of her and her
20 sisters that was given under oath with the attorneys
21 for these companies?

22 A. Yes.

23 Q. And have you developed an opinion or formed an
24 opinion with regards to her exposures to asbestos from
25 these products?

1 A. Yes, I did.

2 Q. And what is your opinion?

3 A. That she was exposed to asbestos from the use
4 of these two manufacturers' products.

5 Q. And did you issue a signed report with your
6 calculations regarding the exposures she had?

7 A. I did.

8 Q. And in your opinion, based upon her many years
9 of use of these products and being around the products
10 when her family members were using them, do you have an
11 opinion whether those exposures was a substantial
12 exposure to asbestos from their products?

13 MR. MULARCZYK: Objection. Foundation.

14 THE COURT: Sustained.

15 BY MR. SATTERLEY:

16 Q. We'll go through the math in a little bit.

17 With regards to Johnson & Johnson -- let's
18 start with Johnson & Johnson -- have you reviewed
19 historical documents with regards to their testing,
20 testing done by laboratories at their request?

21 A. Yes.

22 Q. And with regards to Colgate-Palmolive, have you
23 reviewed testing by laboratories of the Cashmere
24 Bouquet product for the presence of asbestos?

25 A. Yes.

1 Q. And based upon your review of the historical
2 documents, do you have an opinion whether it was
3 documented back in the 19- -- with regards to Johnson &
4 Johnson first, back in the 1960s and the 1970s,
5 asbestos being present?

6 MR. CALFO: Objection, Your Honor. No
7 foundation for this witness.

8 MR. MULARCZYK: And hearsay, Your Honor.

9 THE COURT: Overruled on both.

10 THE WITNESS: Yes, I do have an opinion.

11 BY MR. SATTERLEY:

12 Q. And with -- and with --

13 A. That it is -- that it does.

14 Q. What is your opinion?

15 A. The opinion is that it does.

16 Q. Okay. And we'll go through some of the
17 documents here in a little bit.

18 With regards to Colgate-Palmolive, once again,
19 did you look at the historical documents in the 1970s,
20 '80s, and '90s regarding the Cashmere Bouquet product?

21 A. Yes, sir.

22 Q. And based upon your review of the historical
23 documents of the Cashmere Bouquet product, was it
24 documented in the '70s, '80s, '90s and forth -- so
25 forth, the presence of asbestos?

1 MR. MULARCZYK: Same objections, Your Honor.

2 THE COURT: It's overruled.

3 THE WITNESS: Yes, it was.

4 BY MR. SATTERLEY:

5 Q. First of all, I want to -- I want to ask you a
6 question -- a few questions. Counsel --

7 Oh, there it is. That's what I was looking for
8 right there.

9 Counsel for Johnson & Johnson told the folks on
10 the jury that you personally have made \$30 million
11 working for plaintiffs' lawyers.

12 Is that true?

13 MR. CALFO: Objection, Your Honor. Misstates
14 opening statement. I said the company did.

15 MR. SATTERLEY: I disagree.

16 THE COURT: It's overruled. The jury will --

17 THE WITNESS: No, I have not made \$30 million
18 working for plaintiffs' attorneys personally.

19 BY MR. SATTERLEY:

20 Q. You and your company, the company you work for,
21 MAS, that's --

22 You're the president of the company; correct?

23 A. Yes, I am.

24 Q. Okay. Is it -- it is true, though, over the
25 course of 30-some-odd years you've charged for your

1 time in litigation to both plaintiffs -- plaintiffs and
2 defendants in these forensic situations?

3 A. Yes, I have.

4 Q. And would it be fair to say, over 30-some-odd
5 years, you have charged -- your company has charged
6 both for your time and all the other folks working --
7 involved in forensic issues, litigation issues, well
8 over \$30 million?

9 A. My time; other individuals that have testified;
10 all the testing we did over the years, especially in
11 the property damage litigation, where we did forensic
12 engineering to identify the products, that would be
13 fair. That's what our company has billed over
14 30 years.

15 Q. With regards to advertising, a Johnson &
16 Johnson lawyer told the folks on the jury that you
17 started advertising for plaintiffs' lawyers -- to get
18 plaintiffs' cases 30-some-odd years ago.

19 Is that true?

20 A. That is not true.

21 Q. We've marked for identification purposes
22 Exhibit 1099. And if I could --

23 It's okay.

24 Let's see. Is the projector on?

25 May I approach, Your Honor?

1 THE COURT: You may.

2 BY MR. SATTERLEY:

3 Q. I'm handing you, Dr. Longo, Exhibit 1095. I
4 shared it with counsel previously, another copy,
5 courtesy copy --

6 THE COURT: Is it 1095 or 1099?

7 MR. SATTERLEY: 1099, Your Honor.

8 -- another courtesy copy.

9 BY MR. SATTERLEY:

10 Q. Is this a journal called *Asbestos Issues*, dated
11 June 1990?

12 A. It is.

13 Q. And by this point in time --

14 If I can figure out how to... there we go.

15 By this point in time, 1990, were you
16 already -- did you already have specialized skill on
17 utilizing the transmission electron microscope?

18 A. Yes, sir.

19 Q. And did you already consider yourself to be an
20 expert on utilizing the transmission electron
21 microscope?

22 A. Yes. I had spent a lot of time, especially in
23 graduate school, as well as in my career at that point,
24 dealing with interpreting, analyzing samples on the
25 transmission electron microscope.

1 Q. It says in this 1990, "Asbestos management
2 strategies for new era building owners."

3 Did your company place an ad in this -- in this
4 journal?

5 A. We did.

6 Q. And did this journal relate to building issues?

7 A. Yes, sir.

8 Q. All right. And is this the advertisement that
9 was placed in this journal in 1990?

10 A. It was.

11 Q. Does this in any way relate to you trying to
12 get business from mesothelioma victims so you can
13 testify in a courtroom like this?

14 A. No, not at all.

15 Q. If somebody were to say this ad right here
16 proves that you were trying to be an expert for people
17 suffering from asbestos disease, would that be
18 accurate?

19 A. No, sir.

20 Q. The person in the ad with -- this is you over
21 here on the right; correct?

22 A. Yes. I've hardly aged at all.

23 Q. Okay.

24 A. Yes, that's me.

25 Q. Okay. And this fellow on the left, who's that?

1 A. That's Mr. George Yamate.

2 Q. Who is George Yamate?

3 A. George Yamate is the author of the TEM
4 protocol -- and you may hear something about it --
5 typically called the Level 1, Level 2, Level 3
6 analysis. There was a draft method issued in the early
7 1980s or so for the EPA, and it's still a widely used
8 protocol, especially Level 2, in our industry. And
9 George Yamate was the author of that.

10 Q. I want to show you this part right here.
11 It's -- it's hard to read. I've got it blown up here.
12 I showed it to counsel.

13 First of all, it says on here, "final clearance
14 lab," "the final clearance lab." What does "the final
15 clearance" mean?

16 A. Final clearance in this industry is that when
17 there is an abatement of removing asbestos, especially
18 in schools, there's a requirement that they do a final
19 air clearance, which means that once the contractor
20 says, "Yes, we're all done. We got all the asbestos
21 out. Everything is clean. There's no asbestos dust
22 left in this area that we did this in containment" --
23 final air clearance would involve going in and taking
24 air samples while the consultant uses a leaf blower at
25 a hundred miles an hour to disturb any dust that may be

1 laying anywhere to see if there's asbestos present
2 before you let the kids back in the school.

3 That's final air clearance, and it's sort of a
4 term now of art that everybody uses. "Yes, we've got
5 some final air clearance samples coming," we know
6 exactly what that is. And that's what we were
7 advertising for.

8 Q. This paragraph here, it says, "Professional
9 asbestos consultants and contractors know that when the
10 job demands the best final air clearance testing by
11 TEM, you go to the people whose rigorous in-house
12 quality control measures produce TEM results and
13 professional support that stands up to the toughest
14 tests you may face."

15 That was included; correct?

16 A. Yes, sir.

17 Q. And you -- had you and Mr. Yamate in a
18 courtroom somewhere in Georgia; right?

19 A. Yes, it was. It was in rural Georgia, and we
20 took this ad in the courtroom to say that "If you use
21 our laboratory and somebody challenges your final air
22 clearance, saying, 'Oh, it's not really clean,' or 'You
23 should have did this,' we would come in and defend our
24 data. We would" -- "If it goes to court, we would be
25 working for you, saying, 'No, this is what the' --

1 'This is the analysis we did, and it's correct.'"

2 That's what that ad was about.

3 Q. And the folks that would be hiring you for this
4 would be building owners or contractors, people doing
5 asbestos abatement?

6 A. Yes, sir.

7 Q. Okay. This had absolutely nothing to do with
8 talc issues?

9 A. No.

10 Q. Had nothing to do with mesothelioma victims?

11 A. No.

12 Q. Had nothing to do with plaintiff lawyers or
13 anything like that?

14 A. No, sir.

15 Q. Now I want to switch gears and talk about
16 testing and testing methods. Tell us about the
17 strengths of utilizing transmission electron microscope
18 for the identification of asbestos.

19 A. Its strengths are that it's the most sensitive
20 method out there in that it can detect single asbestos
21 fibers and fully characterize them in that if you see a
22 single small fiber, you can get the chemistry of it,
23 utilizing EDXA, or the energy dispersive x-ray. So you
24 can do microchemistry.

25 You can get crystalline structure information

1 by doing the diffraction patterns. I know Mr. Poye
2 probably went through all that when he was here,
3 diffraction patterns.

4 And it allows you to take photographs of these
5 micro- -- these -- these microscopic fibers.

6 And so if you have something there, you can
7 fully characterize it. So it still is the most
8 sensitive method for this type of analysis.

9 Q. I want to show you what's already in evidence,
10 Exhibit 326. This is 1974, January 3rd.

11 MR. SATTERLEY: May I approach, Your Honor?

12 THE COURT: You may.

13 BY MR. SATTERLEY:

14 Q. January 3, 1974, on Johnson & Johnson
15 letterhead. And you've seen this in the past and
16 considered this; correct?

17 A. I have.

18 Q. And this is from A.J. Goudie to Dr. Gaughran
19 and Dr. Shelley, "Purchase of a transmission electron
20 microscope plus attachments."

21 Do you see that?

22 A. I do.

23 Q. And Dr. Goudie says, "Over the past three
24 years, there seems to have been general agreement that
25 transmission electron microscope is the only absolute

1 proof with electron diffraction for the identification
2 of asbestos in talc."

3 Do you agree with the statement that was said
4 in 1974?

5 A. Yes and no. I would agree, in 1974, that was
6 the absolute best instrument to use, but only for the
7 positive identification.

8 The "no" part is, it's not -- if you don't see
9 asbestos by TEM using that at the time, it doesn't mean
10 that there's no asbestos present. It just means you
11 didn't detect it.

12 So, yes, it is the most -- at that time, it was
13 the best method to use for absolute identification.

14 THE COURT: Mr. Satterley, if you're moving on
15 to something else, would you please identify the
16 document that you have on the screen by the exhibit
17 number.

18 MR. SATTERLEY: I apologize, Your Honor. I
19 thought I did. 326.

20 THE COURT: All right.

21 MR. SATTERLEY: I apologize.

22 The next document that's already into evidence,
23 Exhibit 238. And may I approach again, Your Honor?

24 THE COURT: You may.

25 BY MR. SATTERLEY:

1 Q. This is March 1974, a confidential Johnson &
2 Johnson memorandum.

3 MR. SATTERLEY: I provided a copy to counsel.
4 Another copy.

5 BY MR. SATTERLEY:

6 Q. And flip over to the second page, page 2.

7 To put this into context, on the first page,
8 does it say it's -- it's to the Windsor Minerals,
9 Windsor, Vermont, from R.C. Reynolds, Dartmouth
10 College?

11 Do you see that on the first page?

12 A. Yes, sir, I do.

13 Q. And this -- "Subject: Analysis of talc
14 products and ores for asbestiform amphiboles"?

15 A. Yes, sir.

16 Q. And on the second page, it says, where I've
17 highlighted here on Exhibit 238, "For the reasons
18 described above, a concentration technique is
19 mandatory" --

20 MR. SATTERLEY: I apologize, Your Honor.
21 Mrs. Schmitz.

22 -- "for the reasons described above, a
23 concentration technique is mandatory because it brings
24 the amphiboles into a reasonable concentration range
25 for optical or other methods of analysis.

1 "Such a method has been developed, and it" --
2 "it is described in this report."

3 Have you considered this document in your
4 analysis of what's known as the concentration method?

5 A. I have.

6 Q. And based upon this document and many other
7 documents, was the concentration method a method that
8 was discussed within Johnson & Johnson way back in the
9 1970s?

10 A. Yes, sir, it was. Early '70s.

11 Q. And I would like to show you another document
12 that you -- I believe you considered.

13 This is Exhibit 329. It's already into
14 evidence. This is dated June 3, 1973, on Johnson &
15 Johnson letterhead.

16 And do you see it's signed off by
17 Dr. D.R. Petterson?

18 A. I can't see who it's signed off by on --

19 Q. The name at the bottom -- oh, I'm sorry.

20 MR. SATTERLEY: May I approach, Your Honor, and
21 hand the witness -- I apologize.

22 THE WITNESS: I believe you're correct, but I
23 just wanted to check.

24 BY MR. SATTERLEY:

25 Q. Thanks for helping me out there. All right.

1 You see now, Doctor, that -- D.R. Petterson's
2 name at the bottom?

3 A. I do.

4 Q. And it's carbon-copied to W. Ashton?

5 A. Yes, sir.

6 Q. And have you considered many documents from
7 Bill Ashton, or William Ashton, historically with
8 regard to Johnson & Johnson?

9 A. Yes, sir.

10 Q. And it says in -- it says in the third
11 paragraph -- it says, "Note the use of the
12 concentration technique is the drafted specification
13 for the analysis of asbestos.

14 "Also, I have discussed with Shelley that the
15 samples to be sent by Dr. Rolle will be on 20 recent
16 samples of powder in which we found no
17 tremolite/actinolite by optical technique."

18 I want to stop right there and ask you to
19 explain the optical technique and why you would analyze
20 using a concentration technique if there are no
21 tremolite or actinolite identified.

22 A. The optical technique is using polarized light
23 microscopy, and that is a very good technique as long
24 as the amount of asbestos in there is high enough for
25 it to detect.

1 Every analytical method has an analytical
2 sensitivity/detection limit, where the analyte -- and
3 we all call it analytes -- the asbestos is at a
4 concentration still in there but lower than the optical
5 microscope can detect. You say it's nondetect.

6 So in order to increase the ability to detect
7 it or get a better analytical sensitivity, you go to
8 the concentration method, which is -- literally, you're
9 looking for needles in a haystack. That might take you
10 a long time. You may miss them.

11 If you get rid of the hay and just look for the
12 needles, because the needles are all now concentrated,
13 you can come back and say, "Yes, there are all these
14 needles in the haystack. I just couldn't see them
15 before because there was so much hay, I had to weed
16 through."

17 And that's what the concentration does.

18 Q. Is the concentration method a preparation
19 method that's done before you put it onto the filter
20 before it goes into the microscope itself?

21 A. Yes, sir. That's a good point.

22 These techniques -- polarized light microscopy,
23 XRD, x-ray diffraction, and especially transmission
24 electron microscopy -- it's all about the sample
25 preparation and how good a job you do and how you

1 concentrate it, how you put it together before it goes
2 into what we call tools.

3 Because the analytical transmission electron
4 microscope is just going to give you the same
5 information that it would give you no matter what.
6 It's all about sample preparation.

7 So you prepare the sample in a way that gives
8 the best opportunity to see if you can detect the
9 asbestos at the lower -- the best analytical
10 sensitivity you can. That's all done before you get to
11 the electron microscope.

12 All these techniques, it's all about sample
13 preparation.

14 Q. And with regards to the presence of platy talc,
15 if you prepare a sample where it has lots of platy talc
16 on it, will that -- does that potentially obstruct the
17 analyst's ability to see the asbestos materials?

18 A. Yes. You're covering it up, especially in the
19 transmission electron microscope, or the TEM --
20 everybody calls it TEM.

21 If I have an asbestos fiber here and I have a
22 platy talc on top of it -- we're imaging by using an
23 electron beam, which goes real good for resolution, but
24 it only has so much strength. So it can't go through
25 stuff that builds up.

1 So if here's my asbestos fiber and I have a
2 platy talc here, I go, "Okay. Well, I can see it."
3 But if I start getting more and more platy talc on here
4 because it's so concentrated with it, pretty soon, it's
5 like that. You can't find it, no matter how much you
6 look for it, TEM, if you have too many talc particles
7 in there.

8 Good analogy is that I have a big bowl of
9 spaghetti, and there's a couple of meatballs in there,
10 and I'm just looking at the bowl, and I can't see them.
11 But if I take it and spread it out or I get rid of the
12 spaghetti, the meatballs stand right out.

13 And -- and that's with both polarized light
14 microscope and especially with TEM. If you have too
15 much talc in there, you can't see the asbestos fibers.

16 So what they used to do -- or still -- people
17 still do it -- is, they dilute the sample to spread all
18 that talc out so that you can find the asbestos fibers.
19 But if you dilute the talc particles, you're diluting
20 the asbestos fibers, too. So now I'm spreading it out
21 and making it harder and harder to find something if
22 it's present.

23 If I use the concentration method, I get the
24 talc out of there, and I can concentrate the asbestos
25 down, better opportunity to see if it's really

1 positive, detectable or not.

2 Q. This 1974 Johnson & Johnson document says,
3 "Shelley reports that Pooley" -- you know who
4 Dr. Pooley is?

5 A. Yes, sir, I do.

6 Q. -- "that Pooley has found actinolite in our
7 Vermont talc by his concentration technique. Italian
8 talc by the same technique appears to be free of
9 amphiboles. I have sent the report referred to
10 I.W. Sloan on to Roger Miller for their study."

11 Do you see that?

12 A. Yes, sir.

13 Q. Is this one example in 1973 of the use of the
14 concentration method by analysts finding asbestos that
15 they otherwise would not find by optical microscope?

16 A. That is correct.

17 Q. One other exhibit and then I want to talk -- I
18 want to show the animation on the heavy liquid
19 separation.

20 This is Exhibit 330.

21 MR. SATTERLEY: May I approach, Your Honor?

22 THE COURT: Yes, you may.

23 MR. SATTERLEY: It's already into evidence.

24 BY MR. SATTERLEY:

25 Q. This is November 26, 1974, on Johnson & Johnson

1 letterhead. And it, Dr. Longo, is signed by a --
2 signature on the second page, John P. Schelz --
3 S-c-h-e-l-z.

4 Do you see that?

5 A. Yes, sir, I do.

6 Q. Is this a document you considered in
7 formulating your opinions in analyzing this case?

8 A. Yes.

9 Q. And it says, "It's a review of experimental
10 techniques for the concentration of asbestos minerals
11 in talc, Project Number 0503-00."

12 Do you see that?

13 A. I do.

14 Q. It says, "Our preliminary investigation of
15 experimental technique for the concentration of
16 asbestos minerals in talc has been in two areas:" And
17 then they have a whole section on -- at the top.

18 Do you see that?

19 A. I do.

20 Q. And Dr. Fred Pooley is referenced there.

21 A. Yes, sir, he is.

22 Q. And I want to focus on the second.

23 It says, "The concentration of
24 actinolite/tremolite" -- by the way, actinolite and
25 tremolite, is that a form of asbestos?

1 A. It is.

2 Q. And we'll show photographs.

3 Have you seen actinolite/tremolite asbestos
4 under your microscopes?

5 A. We have.

6 Q. And have you taken photographs of them and
7 demonstrated for the presence of talc?

8 A. Yes, sir.

9 Q. It says, "The concentration of actinolite,
10 tremolite, and chrysotile from talc by individual heavy
11 liquid separation technique developed by Dr. Robert
12 Reynolds, Dartmouth College. Dr. Reynolds of the
13 Department of Earth Science has been requested by
14 Mr. V. Zeitz" --

15 You know Vernon Zeitz? You know that name?

16 A. I've have see it on documents.

17 Q. -- "of Windsor Materials (sic) to work on the
18 actinolite concentration technique. This method
19 utilizes the difference in densities between actinolite
20 and other amphiboles and talc to effect separation in a
21 heavy liquid medium."

22 Do you see that?

23 A. I do.

24 Q. Is that what's sometimes referred to as the
25 heavy liquid separation?

1 A. It is.

2 Q. So when we talk concentration and we talk heavy
3 liquid separation, are we basically talking about the
4 same process?

5 A. It is the same process, but you can concentrate
6 by other methods for other things, like if you're --
7 it's calcium carbonate and -- you can dissolve out the
8 calcium carbonate with a slight acid solution. That's
9 not what we're dealing with here. They're all
10 concentration methods, but this one uses liquid that is
11 heavier density than, say, water, to cause things to
12 sink versus causing things to float.

13 Amphibole asbestos will sink, the talc will
14 float because of their different densities.

15 Q. It says, "Following Dr. Reynold's procedure, we
16 have been able to detect tremolite by optical
17 microscopy dispersion staining in the separated
18 fraction from a sample containing initially as little
19 as 0.01 percent by weight tremolite in Vermont talc."

20 And I want -- and I want to ask you: The
21 separation process, can be utilized by both the TEM and
22 by a regular microscope?

23 A. Yes, sir.

24 Q. Okay. And can -- can the separation method
25 be -- once it's separated and prepped out, can it be

1 looked under what's called a "PLM," a polarized light
2 microscope?

3 A. Yes, it can.

4 Q. Now I want to switch gears and talk about the
5 animation. And this is Exhibit 1047 for demonstrative
6 purposes only.

7 Have you in the past, Dr. Longo -- well, did
8 you actually assist in the preparation of this
9 animation?

10 A. I did.

11 Q. And you told me and my graphics people how
12 to -- how the heavy liquid separation process occurred?

13 A. Yes.

14 Q. And let me --

15 Does this heavy liquid separation animation
16 truly -- accurately demonstrate the process of heavy
17 liquid separation?

18 A. It does.

19 Q. And as we see this animation perceived through,
20 if you can talk us through what -- what's happening?

21 A. Here's the centrifuge tube. You have talc in
22 the bottom. And then you're putting a heavy liquid
23 density material in there so that you can separate the
24 talc from any potential amphiboles that might be
25 present. So you shake it up and get the talc

1 distributed through there and put it in a centrifuge
2 where you're spinning it anywhere from 7,000 to
3 9,000 rpm. After you're done, you'll have a talc plug
4 at the top, since it floats, and most of your
5 amphibole -- potential amphibole asbestos minerals will
6 come to the bottom of the centrifuge tube.

7 Once that happens, you can remove the tip. We
8 use a technique by flash freezing the centrifuge tube
9 in liquid nitrogen and using sort of a guillotine-type
10 apparatus to just cut the tip off, and then put that in
11 solution, filter it, and then analyze it.

12 We normally use 30 milligrams of talc when we
13 do this. And we can put the entire amount of the
14 collected material on a TEM filter.

15 If you use 30 milligrams of talc and filtered
16 that on to a TEM filter without doing this, the sample
17 would be black. It would be so thick the electron
18 beams can't go through the sample. You would never be
19 able to do that.

20 So this increases the sensitivity almost
21 10,000 times for the finding of potential amphibole
22 asbestos.

23 Q. Have you utilized, you and your laboratory,
24 utilized the heavy liquid separation technique with
25 regards to samples of Johnson & Johnson, historical

1 samples provided by Johnson & Johnson, for preparation
2 in this case?

3 A. Yes, I have.

4 Q. Have you, you and your laboratory, analyzed
5 Cashmere Bouquet utilizing the heavy liquid separation
6 for the identification of asbestos?

7 A. Yes, we have.

8 Q. And have you issued reports and photographs and
9 documented asbestos after utilizing the heavy liquid
10 separation?

11 A. Yes.

12 Q. Have you and your laboratory utilizing heavy
13 liquid separation preparation and utilize that under a
14 transmission electron microscope?

15 A. Yes, we have.

16 Q. Have you utilized the heavy liquid separation
17 for -- have you utilized the heavy liquid separation
18 specifically regarding Cashmere Bouquet under a
19 polarized light microscope?

20 A. Yes.

21 Q. And will -- a little bit later will you be able
22 to demonstrate the photographs and what's represented
23 in the photographs?

24 A. Yes.

25 Q. Using the heavy liquid separation, the

1 concentration method, did you and your laboratory find
2 asbestos in the Colgate Cashmere Bouquet products that
3 you tested?

4 A. Yes, we did.

5 Q. And did you -- did I specifically send -- ask
6 you to have someone from your lab go to the RJ Lee
7 Group to pick up Cashmere Bouquet samples?

8 A. Yes.

9 Q. And one of your analysts named Zach, did he go
10 up to Pittsburgh, or around Pittsburgh, to get the
11 Cashmere Bouquet samples with the -- that was with the
12 RJ Lee Group?

13 A. Yes, he did.

14 Q. And do you -- did you guys have a chain of
15 custody and document what was -- what was a part of
16 that Cashmere Bouquet product?

17 A. Yes, sir.

18 Q. We'll talk about that in a little bit.

19 Oh, did you find -- did you analyze 20 samples
20 from the samples you received?

21 A. Yes.

22 Q. And of the 20 samples of Cashmere Bouquet,
23 historic Cashmere Bouquet, that you analyzed in your
24 laboratory, how many of them had asbestos in them?

25 A. All of them.

1 Q. All 20?

2 A. Yes, sir.

3 Q. This next exhibit that's in evidence, 251.

4 MR. SATTERLEY: May I approach, Your Honor?

5 THE COURT: You may.

6 BY MR. SATTERLEY:

7 Q. This is dated November 24, 1976. This is by
8 Mr. Ashton to Mr. Lee. Once again, it's Exhibit 251.

9 Is this a document you've considered in
10 analyzing this case?

11 A. Yes, I have.

12 Q. And it's signed off by Mr. Ashton, and it's
13 copied to Dr. Semple and Dr. Petterson on Johnson &
14 Johnson letterhead there.

15 And it says -- in 1976 to Mr. George Lee,
16 "Attached is a copy of a disturbing proposal request
17 which the FDA has currently made available to qualified
18 bidders. The scope of the work is the separation of
19 asbestos in foods, drugs, and talc for identification
20 and determination. I find this proposal more
21 disturbing than other proposals up to now because it
22 aims at separation and isolation of asbestos from a
23 wide scope of products and animal tissues. Up to now,
24 our main problems have had to do with the
25 identification, whereas, now it looks like the FDA is

1 getting into the separation and isolation methodology
2 which will mean concentration procedures. As I have
3 pointed out many times, there are many talcs on all
4 markets which will be hard-pressed in supporting purity
5 claims when ultra-sophisticated assay separation and
6 isolation techniques are applied. Chances are that the
7 FDA proposal will open up the" -- "open up new problem
8 areas with asbestos and talc minerals."

9 Is that the process by which you utilize on the
10 talcs that you analyzed that we're going to talk about
11 later?

12 A. Yes, it is.

13 Q. Does that isolation and separation of asbestos
14 from talc allow you to see under the microscope the
15 asbestos that was present?

16 A. Yes, it did.

17 Q. And have you also, Dr. Longo, had talc samples
18 analyzed by other techniques like XRD or optical
19 microscope analysis where no asbestos was present but
20 then you looked at it by TEM and asbestos would be
21 present?

22 A. Correct. The XRD would be nondetectable.
23 Regular PLM nondetectable in some cases. Some cases
24 you do find it by regular PLM. Where the TEM or the --
25 using heavy concentration method or PLM heavy

1 concentration method had the highest percentage of
2 positives where the other techniques on the same sample
3 were negative.

4 Q. Based upon your analysis of all -- all aspects
5 of this case, did the FDA ever adopt or require the
6 isolation and separation method and require folks to
7 utilize this to find asbestos in talc?

8 A. No. They never -- they never finalized that.

9 Q. The next document, before our mid-morning
10 break, Exhibit 234.

11 MR. SATTERLEY: May I approach, Your Honor?

12 THE COURT: You may.

13 MR. SATTERLEY: It's already into evidence.
14 Provide a copy to counsel. This is entitled,
15 Exhibit 234, "Proposed Specs for Analyzing Talcs for
16 Asbestos."

17 And the first page is dated May 16, 1973. And
18 this is on Johnson & Johnson letterhead; correct?

19 A. It is.

20 Q. And just to put it into context, this is signed
21 off by Tom Shelley and carbon-copied to a number of
22 other people, including Dr. Fuller, Dr. Goudie,
23 Dr. Nashed, and Dr. Petterson; correct?

24 A. That is correct.

25 Q. And he says, with regards to the third

1 paragraph, "England is considering method of
2 preconcentrating the asbestos so as to be able to
3 analyze by x-ray. They find no asbestos by doing this
4 with Italian talc. They find, Pooley, 0.05 percent of
5 a tremolite type in Vermont."

6 Is that a document you considered in coming to
7 your opinions in this case?

8 A. It is.

9 Q. And did you find asbestos in Vermont talcs?

10 MR. CALFO: Objection. There's no foundation
11 for that from this document, Your Honor.

12 MR. SATTERLEY: I'm asking a separate question.

13 THE COURT: He asked whether he found it.

14 THE WITNESS: We have.

15 BY MR. SATTERLEY:

16 Q. If we flip over to page 2, under the Pooley
17 method, talking about the -- the preconcentration of
18 asbestos followed by x-ray diffraction analysis.

19 Now, this -- they called this the "Pooley
20 method" here. It says, "This technique has not been
21 written up yet, but evidently when applied to Vermont
22 talc, 0.05 percent of tremolite talc is found. The
23 limitation of this method is that it may be too
24 sensitive."

25 Do you see that?

1 A. I do.

2 Q. And from a material standpoint -- from a
3 material science standpoint, do you find that the
4 analytical -- the heavy liquid separation is too
5 sensitive?

6 A. No. Saying something is too sensitive in the
7 analytical world makes no sense. You're always
8 striving to get better and better detection limits to
9 be able to fully characterize. That's how all progress
10 is made through the years in analytical equipment:
11 making it better, more sensitive so you can get the
12 information. Now, what you do with that information
13 may or may not use it, but -- it's just something that
14 is foreign to our -- to me that you would say some
15 analytical method is too sensitive.

16 MR. SATTERLEY: Your Honor, it may be a good
17 time for the mid-morning break.

18 THE COURT: What time is it? It's 10:30.

19 MR. SATTERLEY: Is that okay?

20 THE COURT: Sure. We will take our mid-morning
21 break. Come back in 15 minutes.

22 Please remember the admonition that it is your
23 duty as jurors not to converse amongst yourselves or
24 with anyone else on any subject connected with the
25 trial or to form or express any opinion thereon until

1 the matter is submitted to you.

2 Enjoy your break.

3 (Whereupon, the jury having exited the
4 courtroom, the following proceedings were held:)

5 THE COURT: The record will reflect the jurors
6 have departed the courtroom.

7 Is there anything we need to put on the record?

8 MR. SATTERLEY: Nothing from the plaintiff,
9 Your Honor.

10 MR. CALFO: No, Your Honor.

11 THE COURT: Enjoy your break.

12 MR. MULARCZYK: Thank you, Your Honor.

13 (Recess taken.)

14 (Whereupon, the following proceedings were held
15 outside the presence of the jury:)

16 MR. SATTERLEY: We want -- we'd like to put
17 Your Honor on notice that we've agreed that I've met
18 and conferred with counsel that I'm going to use two
19 scales as demonstratives under the Elmo, if I can
20 figure out how to do this, just for -- to -- for the
21 detection limit, not right this second but later this
22 morning. It's a demonstrate testify to show the
23 limitations of detection. And counsel, I've shared
24 this with counsel and both counsel agrees.

25 THE COURT: All right.

1 Ms. Hill, please bring the jury in.

2 What was the last number?

3 THE WITNESS: Your Honor, I think it's 0234.

4 MS. CLANCY: Thank you.

5 (Whereupon, the jury having entered the
6 courtroom, the following proceedings were held:)

7 THE COURT: The record will reflect that all
8 the jurors are in their appointed seats, counsel are
9 present, and William Longo is in the witness box.

10 Please recall that you're still under oath.

11 THE WITNESS: Yes, Your Honor.

12 THE COURT: You may continue with your direct
13 examination of this witness.

14 MR. SATTERLEY: Thank you, Your Honor.

15 BY MR. SATTERLEY:

16 Q. Dr. Longo, we're going to continue to just talk
17 on one more document on -- regarding asbestos and talc.
18 This is Exhibit 350.

19 MR. SATTERLEY: May I approach again,
20 Your Honor?

21 THE COURT: You may.

22 BY MR. SATTERLEY:

23 Q. And this is from the same Tom Shelley we saw
24 earlier. March the 30th, 1973.

25 And is this a document you've considered in

1 evaluating the issue -- issues in this case?

2 A. Yes, sir.

3 Q. And this is carbon-copied to a large number of
4 folks, including many of the folks we talked about
5 earlier: Petterson, Nashed, Hildick-Smith, Rolle,
6 Goudie, Fuller, and Dr. -- or Mr. Dean in England;
7 correct?

8 A. That is correct.

9 Q. And it relates to asbestos talc -- or talc
10 asbestos patents. And Dr. Pooley. It says, "Harold,
11 we will want to carefully consider the Pooley patents
12 re asbestos in talc. It's quite possible that we may
13 wish to keep the whole thing confidential rather than
14 allow it to be published in patent form and thus let
15 the whole world know."

16 Do you see that?

17 A. I do.

18 Q. Have you ever seen any patents developed by
19 Johnson & Johnson or any of the scientists at Johnson &
20 Johnson regarding the concentration technique, heavy
21 liquid separation, to identify asbestos in talc?

22 A. No. None exists that I can tell.

23 Q. Now, you've reviewed, you said earlier,
24 historical testing of baby powder and talcum powder for
25 the presence of asbestos going back into the 1970s and

1	beforehand; correct?
---	----------------------

2	A. That is correct.
---	---------------------

3 Q. And have you also -- or do you understand that
4 the Shower -- the Shower to Shower product -- you
5 looked at some of the -- Lee Poye's analysis of Shower
6 to Shower; correct?

7	A. We did.
---	------------

8 Q. And, based upon all the materials you reviewed,
9 do you understand that the Vermont talc was the source
10 of Shower to Shower for many years, including in the
11 1970s?

12	A. That is correct.
----	---------------------

13 Q. And is it important to look at the Shower to
14 Shower product and the analysis of Shower to Shower in
15 understanding whether or not asbestos was present in
16 Vermont talcs?

17 A. It is.

18 Q. Now, the concentration method, the heavy liquid
19 separation method, is there a limitation with regards
20 to the ability to see chrysotile with that method?

21	A. There is.
----	--------------

22 Q. And what is that limitation?

23 A. The limitation is the density of chrysotile
24 asbestos is very close to the density of talc.

25 Talc is approximately -- you have 2.7 to

1 2.6 grams per cubic centimeter. Like a sugar cube, how
2 much that weighs, how many grams will fit in a sugar
3 cube.

4 And chrysotile is about 2.5, 2.4.

5 So you would not expect to see chrysotile using
6 the method as written. It will float up to the top
7 with the talc. Also, anthophyllite asbestos has a
8 density close to talc. If it doesn't have any iron.
9 If it has iron, the density increases and you will --
10 if it's present in the amount necessary, you'll find it
11 by the heavy liquid density separation. So those are
12 the two drawbacks currently for the heavy liquid
13 density separation.

14 Q. Well, those drawbacks that you can't find
15 chrysotile -- the drawback that you can't find
16 chrysotile asbestos with the heavy liquid separation,
17 in your opinion, Dr. Longo, is that a reason why you
18 should never ever, ever, ever use it?

19 A. No. That would be silly. You can find
20 tremolite, actinolite, all the tremolite asbestos solid
21 solution series. The majority of what you find in
22 anthophyllite has iron in it. So -- and, of course,
23 the solid solution series with the other asbestiform
24 minerals that can form when anthophyllites form. So,
25 no. You're -- yeah, it's simple. Why throw the baby

1 out with the bath water when you can get so much
2 information using that?

3 Q. Historically going back into the 1970s, was
4 Shower to Shower examined for -- and chrysotile
5 asbestos been documented in that product?

6 A. It has.

7 Q. And I'd like to show you what's already
8 admitted into evidence.

9 MR. SATTERLEY: Your Honor. May I approach
10 again?

11 THE COURT: You may.

12 BY MR. SATTERLEY:

13 Q. This is Exhibit 0278, the University of
14 Minnesota Space Science Center.

15 Have you considered this, Dr. Longo, in your
16 analysis of whether or not there's asbestos in Vermont
17 talcs?

18 A. Yes.

19 Q. And does -- was this the analysis of Shower to
20 Shower product back in 19' -- in the early 1970s for
21 the identification of asbestos?

22 A. Yes, sir, it was.

23 Q. If you can flip over to page 4. And do they
24 describe -- and just so that we --

25 Let me zoom out. Zoom out.

1 The University of Minnesota Space Science
2 Center. Page 4.

3 Do they utilize the electron microscope to
4 identify chrysotile asbestos?

5 A. Yes, sir, they do.

6 Q. And do they indicate that they were taking
7 photographs -- well, first of all, they did a
8 diffraction pattern and they take photographs of the
9 chrysotile asbestos they located in the Shower to
10 Shower product?

11 A. That is correct.

12 Q. And if we flip over to the Figure 17A and 18A.
13 They take a picture of -- it says "S to S grid." And
14 they got a grid number there?

15 A. Correct.

16 Q. And is that -- is that a photograph of a
17 chrysotile asbestos fiber in the Shower to Shower
18 product in the early 1970s by Dr. Hutchinson?

19 A. Yes, sir. That's actually a chrysotile bundle
20 and that's sitting on a foam -- formed -- foam bar grid
21 covering. And that's -- that would be classic
22 asbestos.

23 Q. And over here on the next page, two pages
24 later, page 25 of this exhibit, Figure 18A, once again,
25 Shower to Shower.

1 Does this demonstrate the chrysotile asbestos
2 in the Shower to Shower product?

3 A. Yes and no.

4 Q. Well, tell me yes and no.

5 A. Yes, it has the morphology and this is what you
6 would expect. But they also, if you go to the previous
7 page, they have their diffraction patterns associated
8 with this. And you can't hardly see it there, but it
9 has some classic streaking on it. That's a little
10 small.

11 But they did two things. It has to have the
12 right morphology tubular structure and then the
13 diffraction pattern showing the right crystalline
14 structure.

15 Q. If we flip to the next page. This one is the
16 one you said "yes and no" to. What about the next page
17 here, Figure 18B, what does this demonstrate?

18 A. Again, it demonstrates bundles of chrysotile
19 asbestos along with the other information, so you have
20 chrysotile here.

21 Q. And does this assist in your opinion -- or does
22 this add to your opinion, I should say, that there is
23 historically asbestos documented in Vermont talc?

24 A. Yes, sir.

25 Q. The next document already into evidence is

1 Exhibit 6 -- 679.

2 MR. SATTERLEY: And request permission to
3 approach, Your Honor?

4 THE COURT: You may.

5 BY MR. SATTERLEY:

6 Q. And this is October 27, 1972. An examination
7 of Johnson & Johnson Baby Powder sent to Dr. Goudie.
8 Exhibit 679.

9 And have you seen and considered this
10 examination by McCrone from 1972, Dr. Longo?

11 A. Yes, sir, I did.

12 Q. And did McCrone -- McCrone laboratory identify
13 asbestos in this examination in 1972?

14 A. They did.

15 Q. By the way, let me talk about McCrone for a few
16 minutes.

17 Walter McCrone, did you know who he was?

18 A. Yes, sir. Everybody does in the microscopy
19 field.

20 Q. Was he recognized as someone that was very --
21 very good at the PLM, the polarized light microscope?

22 A. He was a polarized light microscope expert.

23 Q. As far as his involvement with the transmission
24 electron microscope, was Walter McCrone known to be a
25 TEM person?

1 A. Well, he understood it, but he didn't routinely
2 do transmission electron microscopy. His area and the
3 McCrone Atlas that every PLM lab has was polarized
4 light microscopy of all types of minerals. I mean, he
5 was the one who looked at the Shroud of Turin. He's
6 that good of an optical microscopist.

7 Q. With regards to McCrone laboratory, have you
8 previously in the past stated that McCrone laboratory
9 is an outstanding laboratory?

10 A. Yes, sir, I have.

11 Q. And have you said that they're one of the
12 leaders in the world, McCrone is one of the leaders in
13 the world, in the microscope world?

14 A. Yes, sir. I've worked for some of the same
15 clients that they had done analysis for back in the
16 '70s and '80s where I was defending them and saying,
17 they used McCrone. They used a very good lab to tell
18 them that there was asbestos or not in a product.
19 There was a little -- it was a fertilizer company. So
20 I have stated that a number of times.

21 Q. And was -- when you stated that a number of
22 times, and gave those opinions about McCrone, was that
23 prior to your analysis of all these internal documents
24 you've looked at in talc litigation?

25 A. Yes, sir. It was before that where I was able

1 to get documents from McCrone to start looking at the
2 type of analysis they were doing, and some of the
3 things they were doing -- and you have to understand.
4 Walter McCrone very rarely -- after about 1960 very
5 rarely was in the laboratory. He was running the
6 McCrone Research Center, a nonprofit that did teaching,
7 et cetera. It was others that were actually in charge
8 of McCrone after about 1960 or so. Every now and then
9 he would, but very rarely.

10 Q. And do you have -- have you formed opinions and
11 criticisms of some of the analysts of -- from Walter
12 McCrone that you've seen from looking at some of these
13 McCrone reports involving talc?

14 A. Yes, sir, I have criticized them.

15 Q. And what opinions have you formed?

16 A. Things like, you know, willingness to change
17 little things -- change on reports, saying things like
18 they've never found asbestos in all the talc samples
19 they ever used. That was a letter sent out to a trade
20 organization, even though they had data that showed
21 asbestos, internal data, for their talcum powder or
22 baby powder companies they were working for.

23 So, you know, it changed my opinion a little
24 bit of them. They're still great scientists there, but
25 it sort of -- you know, it sort of was, oh, okay.

1 Q. So, is it fair to say you got analyzed, analyst
2 by analyst, with regards to what they've done
3 historically?

4 A. Not only that, you have to look at what methods
5 they were using. Are they using the best method
6 available? Is the results consistent -- do the results
7 make sense or can they make these statements, like this
8 talc sample -- this talcum powder sample or cosmetic
9 talc sample was negative and therefore it's free of
10 asbestos?

11 Nobody can ever say that. No analytical
12 technique can ever say it's free of anything. All's
13 you can say is, it's down to our detection limit, it's
14 below our detection limit, and it may or may not be
15 there.

16 Making broad statements like there's nothing
17 in -- we didn't find anything so it's asbestos-free or
18 it's -- anything. Like water. Well, we analyzed this
19 water using the EPA method, there's no lead, it's
20 lead-free. You can't say that. All's you can say is,
21 here's the method we used, here's the analytical
22 sensitivity. We can't say if there's anything there or
23 not below that.

24 Q. This 1972 McCrone report, where it's produced
25 to us by Johnson & Johnson, Exhibit 0679, it says, "Do

1 not use this report. Replace by another version."

2 Have you considered this?

3 A. I have.

4 Q. And in this report, do they actually document
5 asbestos and talk about asbestos found in Batch
6 Samples 108T and 109T?

7 A. Yes, sir, they did. They reported it as
8 present.

9 Q. And specifically with regard to tremolite, in
10 the report that says, "Do not use this report," do they
11 totally -- do they list the total tremolite content of
12 the two samples would be approximately 0.5 percent for
13 108T and about 0.2 to 0.2 -- 0.2 to 0.3 percent for
14 109T?

15 A. Yes.

16 Q. And in the new report, the revised report, is
17 it dated the same date?

18 A. It is.

19 Q. And does it have -- is this information, these
20 numbers and calculations, removed from the report?

21 A. They are.

22 Q. And then the next document I think it's related
23 to this document here. This is Exhibit 225.

24 MR. SATTERLEY: Request permission to approach,
25 Your Honor?

1 THE COURT: You may.

2 BY MR. SATTERLEY:

3 Q. And just so we're clear, the -- well, let me
4 just withdraw that and go right to this report.

5 225 into evidence. It says, "McCrone study
6 being redone." Something...

7 A. I think that says, "New one is in master
8 file" -- in --

9 Q. Oh. "New one is in master talc file."
10 Do you see that?

11 A. Yes, sir.

12 Q. And we see this -- over here, it says,
13 "Walter C. McCrone" there?

14 A. Yes.

15 Q. And if we go to the letter itself, it's dated
16 the same day, October the 27th?

17 A. Yes, sir, it is.

18 Q. And it says -- this is from a fellow named
19 Ian Stewart.

20 You recognize -- or did you -- you recognize
21 Ian Stewart to be an analyst that worked at McCrone?

22 A. Yes, sir. He was both a PLM and electron
23 optics guy. I've known Ian for almost 30 years.

24 Q. Did Ian Stewart work for McCrone for many, many
25 years before he went to the RJ Lee Company?

1 A. Yes, sir, he did.

2 Q. And have you read and seen reports and letters
3 from Ian Stewart many times in the past?

4 A. Specifically in cosmetic talc it's -- since
5 I've been involved in this, but in other litigation in
6 the past, especially when he was at the RJ Lee Group,
7 yes, sir.

8 Q. It says -- Ian Stewart says, "Here is our
9 report on the baby powder samples. I hope to have the
10 Shower to Shower report out to you soon, but something
11 always seems to break loose when I sit down to write
12 it. Yours sincerely." And it's signed by Ian Stewart;
13 correct?

14 A. Yes, sir.

15 Q. Moving forward in time, in the '70s, are there
16 many other tests and testing results where McCrone does
17 analysis for talc samples?

18 A. Yes, sir.

19 Q. And are there instances where McCrone reports
20 there's no asbestos?

21 A. A lot of instances, yes, sir.

22 Q. And is there reports where McCrone reports
23 there's asbestos present?

24 A. Yes, sir.

25 Q. I want to show you another document,

1 Exhibit 158.

2 And this is a -- Exhibit 158 is a confidential
3 document. "New reagent system plant trial at Windsor
4 Minerals."

5 Have you considered this, Dr. Longo?

6 A. Yes, sir, I have.

7 Q. And how is this significant in your opinions
8 here?

9 A. It's significant in that they were trying out
10 different flotation, meaning, one of the ways to clean
11 up the processed talc after it's been milled is to --
12 or before milling is to flotage it to -- just like
13 concentration method. You put in a type of surfactant
14 and it bubbles, sticks to the talc, the big heavy stuff
15 and chunks can go to the bottom.

16 Here they were experimenting with a way to
17 flotage out and remove chrysotile asbestos.

18 And you have to ask yourself, if there's no
19 asbestos in here, why are you trying to develop a
20 system to remove something that's not in the product?
21 Or not in being milled.

22 So this is important to show -- and we're going
23 to be working on this to see if we can use this
24 technology from that data to concentrate the
25 chrysotile.

1 MR. CALFO: Your Honor, I move to strike. That
2 was complete speculation.

3 THE COURT: The jury will ignore the last two
4 sentences of the witness.

5 BY MR. SATTERLEY

6 Q. Dr. Longo, it says, "The use of citric acid in
7 the depression of chrysotile asbestos and other mineral
8 species has been developed at Windsor Minerals in
9 response to the potential need for a means to exclude
10 extremely low levels of these contaminants from the
11 finished product of the beneficiation process."

12 Correct?

13 A. Yes, sir.

14 Q. Is that what you're talking about with regards
15 to trying to remove asbestos from the product?

16 MR. CALFO: Your Honor, again, objection.
17 Calls for speculation on the part of this witness. No
18 foundation.

19 THE COURT: That -- that's overruled. He's
20 interpreting the document.

21 THE WITNESS: Yes, sir.

22 BY MR. SATTERLEY:

23 Q. It says, "The use of these systems is strongly
24 urged by this writer to provide the protection against
25 what are currently considered to be materials

1 presently" -- "presenting a severe health hazard and
2 are potentially present in all talc ores in use at this
3 time."

4 And it's signed off by Vernon Zeitz; correct?

5 A. That is correct.

6 Q. And health hazards is beyond your area of
7 expertise; correct?

8 A. Yes, sir, it is.

9 Q. And then if we flip over to Table 15 of this
10 1974 document.

11 And it says, "Asbestiform fibers counted by
12 Walter C. McCrone," and it's got "ore, product, ore,
13 product, ore, product."

14 And then it's got fiber identification,
15 "probably chrysotile, probably chrysotile," and the
16 fifth one down has got eight and it says "chrysotile,"
17 and the final one says "chrysotile"; correct?

18 A. Correct.

19 Q. Is this further documentary evidence of the
20 presence of asbestos, in your opinion, in the Vermont
21 ore and product?

22 MR. CALFO: Objection, Your Honor. No
23 foundation. Calls for speculation on the part of this
24 witness.

25 THE COURT: Overruled.

1 THE WITNESS: Yes, it does, especially at these
2 concentrations, because they're talking about counts
3 per EM grid. So these are the number of fibers found
4 on an individual grid at the detection limits that they
5 were using at the time, which were somewhat antiquated.
6 BY MR. SATTERLEY:

7 Q. Moving forward from 1974 to 1975, I would like
8 to present you with what's been admitted as
9 Exhibit 724, dated November the 5th, 1975, from Walter
10 McCrone -- from the McCrone laboratory, Gene Grieger,
11 to Vernon Zeitz.

12 Now, Vernon Zeitz, we saw his name on the last
13 document; right?

14 A. Yes, sir.

15 Q. And this one is -- is written to him from
16 McCrone -- from Gene Grieger, senior research physicist
17 at McCrone; correct?

18 A. That is correct.

19 Q. And does he document and report and have an
20 attachment regarding the presence of -- presence of
21 fibers or bundles with regards to the material they're
22 looking at?

23 A. That is correct. They do.

24 Q. It talks about Table 1 showing "actual fiber
25 counts and the approximate equivalent concentration in

1 parts per million of amphibole particles, which we
2 found in these samples.

3 "Some of them seem rather high. One had ten,
4 and one had nine amphiboles. Most of these come in
5 bundles of one, two, or three fibers, with anywhere
6 from two to five amphiboles in a bundle?"

7 Do you see that?

8 A. Yes, I do.

9 Q. Now -- and then there's a chart on the next
10 page; correct?

11 A. There is.

12 Q. And we see the references here to the
13 amphiboles found; right?

14 Oh, I'm sorry. "Fibers of asbestos found,"
15 correct, Dr. Longo?

16 A. That is correct.

17 Q. And some of these reference to "HC." Do you
18 see the -- the sample being HC?

19 A. I do.

20 Q. And based upon your review of the internal
21 documents, do you have an opinion as to what HC
22 represents?

23 MR. CALFO: Objection. Calls for speculation
24 from this witness. No foundation.

25 THE COURT: Mr. Satterley, you put a circle

1 around one that's not on the same level even though --

2 MR. SATTERLEY: I'm sorry, Your Honor.

3 THE COURT: Your yellow marker mismarked it.

4 MR. SATTERLEY: I'm upside down. Which one?

5 THE COURT: It's the third one down. That one
6 is not an HC.

7 MR. SATTERLEY: Oh.

8 Oh, it is HC, Your Honor. There's two HCs
9 right beside each other.

10 THE COURT: All right.

11 MR. SATTERLEY: And both of those are HC.

12 THE COURT: Okay. I -- I stand corrected.

13 MR. SATTERLEY: I apologize, Your Honor. I was
14 trying to do it upside down.

15 THE COURT: All right. The objection is
16 overruled.

17 You may respond to the question.

18 BY MR. SATTERLEY:

19 Q. Do you have an opinion about HC and what that
20 represents based upon all the internal documents you've
21 looked at?

22 A. The H stands for Hammondsville, and the C
23 stands for cosmetic.

24 Q. In your opinion, Dr. Longo, is this another
25 instance of confirmed fibers of asbestos in the

1 cosmetic talc back in 1975?

2 MR. CALFO: Objection. Calls for speculation.
3 No foundation for this witness.

4 THE COURT: That's overruled.

5 THE WITNESS: Yes, it does.

6 BY MR. SATTERLEY:

7 Q. Now, in your testing -- and we're going to get
8 to your testing in a little bit -- you have taken
9 photographs, you've done count sheets, you've done
10 selected area electron diffraction you've done
11 chemistry analysis, EDS; correct?

12 A. That is correct.

13 Q. And you've produced all -- or you've printed
14 all that out and made detailed reports of that and
15 turned it of to the attorneys for these companies;
16 correct?

17 A. That is correct.

18 Q. And in -- in your testing, in your analysis,
19 we're able to look at the actual photographs and the
20 length and the width of the various fibers you found;
21 correct?

22 A. That is correct.

23 Q. Okay. In -- in -- in many of these historical
24 testings -- not all of them, but in many of them -- do
25 we have that same advantage, to look at the

1 photographs?

2 A. No, most of the time not. Very rare.

3 Q. All right. Do we have most of the underlying
4 raw data, being the chemistry, the selected area
5 electron diffraction, to analyze ourselves to see --
6 see what it says?

7 A. Sometimes you have the selected area electron
8 diffraction and occasionally a count sheet, but it's
9 mostly this type of information, where they just
10 say, "We found this."

11 Q. The next one is Exhibit 713.

12 MR. SATTERLEY: May I approach again,
13 Your Honor?

14 THE COURT: You may.

15 BY MR. SATTERLEY:

16 Q. This is 1977, going forward in time.
17 EMV Associates, you understand that to be a laboratory
18 that Johnson & Johnson sent materials to for analysis
19 on a few occasions?

20 A. Yes, sir.

21 Q. And is this analysis of nine talc samples that
22 you have read and considered in formulating your
23 opinions?

24 A. I have.

25 Q. And is this dated, Exhibit 713, April the 1st,

1 1977?

2 A. That is correct.

3 Q. By the EMV Associates; correct?

4 A. Yes, sir.

5 Q. And do they have on this -- in this instance,
6 do they have pictures of -- of things we can look at,
7 the chemistry and the morphology of what's depicted
8 there?

9 A. Yes.

10 Q. And is there reference to composite?
11 Do you know what a composite is?

12 A. Composite typically means that you have mixed a
13 couple different sources into something. Say, for
14 example, you take a composite of maybe two different or
15 three different areas of the talc from a mine or -- and
16 make it all one composite so you can try to analyze
17 what's from these two or three different areas.

18 Q. And here, they say, with regards to --

19 Well, first of all, I've heard before
20 composites and blending. Do you know what blending --
21 blending of talc is?

22 A. Blending is -- can be the same thing, but
23 you're just mixing it all together. And typically,
24 blending and milling -- or blending, you're putting in
25 some of the other nontalc ingredients. Just depends on

1 who was saying it.

2 Q. And it says, "Both large and small" -- "A
3 composite, both large and small fibrous tremolite
4 particles found. See Figure 4."

5 And then it says right below that, "Old stock
6 composite, one small fibrous tremolite particle was
7 found. See Figure 6."

8 Do you see that?

9 A. Yes, sir.

10 Q. So if we go over to Figure 4, that's what we
11 were looking at just a few minutes ago; right?

12 A. Yes.

13 Q. And then we've got -- Figure 6 here, we've got
14 more photographs from 1977 with the chemistry; right?

15 A. Yes, we do.

16 Q. If we zoom in on the top photo, "800X," does
17 that mean 800 magnification?

18 A. It does.

19 Q. And the jury heard last Thursday, when Mr. Poye
20 was here, the difference between talc, platy talc and
21 fibrous talc and fibers and asbestiform.

22 Are you able -- from this -- this 1977 photo,
23 are you able to determine, is this fibrous?

24 A. It meets the definition of a -- of fibrous,
25 yes, sir. It's got parallel sides, and it has an

1 aspect ratio easily equal to or greater than 5 to 1.
2 That looks like an aspect ratio more than on the lines
3 of 20, 30, 40 to 1. And we are looking at a bundle.

4 Q. How do we know that's a bundle?

5 A. Well, a bundle is defined as either two or
6 three fibers parallel touching, and if you look closely
7 on the sides or the bottom, you can see what looks like
8 a splayed end coming off, and you can see individual
9 fibers, even from this xerox copy of -- of this
10 photomicrograph, is what we call them. That's a
11 bundle.

12 Q. And I want to use J&J's definition -- this is
13 Exhibit 430, which is into evidence -- on asbestos.
14 And this is a Johnson & Johnson document. The
15 definition here they have for asbestos, under the J4-1
16 and the TM7024 -- and we'll talk about those methods in
17 a little bit -- it says, "Asbestos is defined to be the
18 fibrous serpentine chrysotile and the fibrous form of
19 the amphibole group as represented by amosite,
20 anthophyllite, crocidolite, tremolite, and actinolite."

21 Is that your understanding of the definition of
22 asbestos?

23 A. Yes, sir, the fibrous form of it.

24 Q. And so if we -- if -- if we have a fibrous form
25 of serpentine, curved serpentine, would that

1 definition -- would that meet the definition of
2 asbestos?

3 A. Yes, sir. Either curved or straight. But
4 typically, curved is seen in bulk samples, and every
5 now and then, you will see it in a TEM because of the
6 higher magnification and the smaller particles.

7 But that is a typical definition, fibrous forms
8 of these amphibole -- amphibole groups.

9 Q. Okay. So right here, back -- Ms. Clancy points
10 out -- where it says "fibrous tremolite" under the J&J
11 definition that we just read, does that fibrous
12 tremolite used in their definition equate to asbestos?

13 A. Yes, sir, it does.

14 Q. One other document, and then I'm going to
15 bounce back to heavy liquid for a minute.

16 Exhibit 726, are you familiar with Forensic
17 Analytical out of Hayward, California?

18 A. Yes, sir, I am.

19 Q. And a fellow named Mark Floyd?

20 A. Yes, sir. I know Mr. Floyd.

21 Q. Mr. Floyd, is he an analyst that identifies
22 asbestos in materials and has written in reports in
23 that regard for many years?

24 A. Many years. Doing it almost as long as me.

25 Q. And have -- in fact, have you analyzed or seen

1 his reports with regards to the presence of asbestos in
2 talc?

3 A. Yes, sir, I have.

4 Q. And this into evidence as Exhibit 726. Does
5 this, Dr. Longo, document the presence of asbestos in
6 off-the-shelf Johnson's Baby Powder in 2004?

7 A. Yes, sir, it does.

8 Q. And is -- Mr. Floyd signs off on it right here?

9 A. Yes. That's his -- that's his initials.

10 MR. CALFO: Objection, Your Honor. There is no
11 foundation for this witness to testify about this.

12 MR. SATTERLEY: Let's zoom in.

13 THE COURT: That's overruled.

14 BY MR. SATTERLEY:

15 Q. Do you see Mr. Floyd -- Mark Floyd, his name
16 right there, Dr. Longo?

17 A. Yes, sir, I do.

18 Q. And with regards to this Johnson's Baby Powder
19 off the shelf, "AN" -- it says, "Asbestos type AN."
20 What type of asbestos was he reporting in 2004 on
21 Johnson's Baby Powder?

22 MR. CALFO: Objection. Calls for speculation
23 from this witness.

24 THE COURT: Overruled.

25 THE WITNESS: "AN" stands for anthophyllite.

1 BY MR. SATTERLEY:

2 Q. And just to understand what has happened here,
3 you understand that this sample was sent to Mr. Floyd
4 by a television -- television station in Sacramento?

5 A. Yes, sir.

6 Q. And does this, in your view, Dr. Longo, add to
7 the -- all the other samples showing the presence of
8 asbestos in Johnson's Baby Powder in the '70s, '80s,
9 '90s, and -- and into the 2000s?

10 MR. CALFO: Objection. No foundation. Calls
11 for speculation from this witness.

12 THE COURT: That's overruled.

13 THE WITNESS: Yes, it does.

14 BY MR. SATTERLEY:

15 Q. Now, we've introduced lots of documents into
16 evidence, and I'm not going to go over all of them with
17 you, obviously, Dr. Longo.

18 But are there other instances in the historical
19 documents regarding Johnson's Baby Powder where
20 asbestos has been documented?

21 A. Yes, sir.

22 Q. Okay. And with regard to Cashmere Bouquet,
23 Colgate-Palmolive, have you also looked at the -- some
24 of the historical documents regarding the presence of
25 asbestos in -- in the Cashmere Bouquet product?

1 A. Yes, I have.

2 Q. And I'm going to -- not going to go over very
3 many, but there are a few into evidence that I wanted
4 to ask you about.

5 By the way, do you have a whole binder full of
6 Colgate reliance? I think I -- it's on the -- right
7 next to the screen.

8 A. Yes, sir, I do.

9 Q. No. Up. Up.

10 A. I knew they were here somewhere.

11 Q. Okay. But do you have two binders? Are those
12 Cashmere Bouquet reliance materials?

13 A. They are.

14 Q. And do they document, going all the way back
15 into the late 1960s and the 1970s, the presence of
16 asbestos in Cashmere Bouquet?

17 MR. MULARCZYK: Objection. Hearsay. Vague.

18 THE COURT: It's vague. You may rephrase your
19 question.

20 BY MR. SATTERLEY:

21 Q. Okay. Are there many --

22 THE COURT: We don't do that Joe McCarthy
23 business of, "Do you have it in the satchel?"

24 MR. SATTERLEY: I understand. Yes, Your Honor.
25 Yes, Your Honor.

1 BY MR. SATTERLEY:

2 Q. Do you have reliance lists, Dr. Longo,
3 regarding identification of asbestos before you?

4 A. I do.

5 Q. All right. One of the reliance lists, does it
6 include documents -- this is going to be
7 Exhibit 3584 -- from McCrone to Joe Simko at
8 Colgate-Palmolive in 1974?

9 A. Yes, sir, it does.

10 Q. And we heard from the corporate representative
11 yesterday, Ms. Scala, Diana Scala --

12 THE COURT: Does that have a number on it?

13 MR. SATTERLEY: Yes. This is Exhibit 3584,
14 Your Honor.

15 BY MR. SATTERLEY:

16 Q. And this is February 5, 1974, regarding the
17 samples designated 516. And you considered this,
18 Dr. Longo; correct?

19 A. Yes, sir, I did.

20 Q. And did McCrone report back to Colgate in 1974
21 that all three samples had chrysotile asbestos in them?

22 A. Yes, sir, they did.

23 Q. And in this particular instance, was there
24 photographs taken -- photomicrographs taken -- Scala
25 Exhibit 18 -- this is Scala Exhibit Number -- were

1 there photomicrographs of -- of the Cashmere Bouquet
2 Sample 516 by McCrone back in 1974?

3 A. Yes, sir.

4 Q. And what we've got displayed on the screen
5 here, based upon what McCrone reports in 1974 and based
6 upon your analysis of -- of -- of this report, do you
7 have an opinion whether this is documenting asbestos?

8 A. It shows what asbestos -- what chrysotile
9 asbestos would look like under the transmission
10 electron microscope.

11 Q. And you talked about both straight and curved.
12 Does it show some curved fibers?

13 A. Fibers and bundles, yes.

14 Q. Okay. And is this just one instance of the
15 identification of asbestos in the -- in the Colgate
16 product?

17 A. Yes, sir.

18 Q. And we know other photographs here -- let me
19 just -- too many papers here.

20 Dr. Longo, in 1974, does McCrone report back to
21 Colgate that it's a chrysotile fiber in the North
22 Carolina Regal sample?

23 A. Yes, they do.

24 Q. And when we get to your photographs in a little
25 bit, do you have photographs where you have materials

1 that look like -- is that platy talc at the top?

2 A. It's either platy talc or calcium carbonate or
3 one of the other accessory minerals. That's not
4 typically a talc look.

5 What's more like talc is at the top of the
6 chrysotile fiber. It's more of a plate shape, little
7 irregular plate shape. That, in my opinion, is what
8 the morphology of platy talc should look like.

9 Q. Is that, in your view, fiber?

10 A. Yes, sir. That meets all the current regulated
11 asbestos definitions by transmission electron
12 microscopy. It has parallel sides and has an aspect
13 ratio, the length divided by the width, of 5 to 1 or
14 greater. That's, oh, probably in the 20- to 30-to-1
15 range.

16 Q. The previous photograph here, does it say
17 "chrysotile fibers" here at the bottom?

18 A. Yes, sir, it does.

19 Q. And is that, in your opinion, a fiber,
20 Dr. Longo?

21 A. Yes, sir. That meets the definition. There
22 are counting rules for determining fibers of asbestos
23 or bundles. That's classic.

24 Q. Is -- is there, in this photograph, examples of
25 the talc or talc particles blocking part of the view of

1 fiber -- a chrysotile fiber?

2 A. Yes, sir. You can see at the top end of the
3 fiber, it looks like we have a talc -- very large talc
4 plate laying over it. Then you have some smaller talc
5 plates to the right of the fiber.

6 So that's a pretty heavily loaded sample, to
7 see that much in one area of the TEM. TEM grid.
8 Excuse me.

9 Q. Now, in regards to your opinions on historical
10 identification of asbestos in Cashmere Bouquet, other
11 than McCrone, are there other laboratories that have
12 likewise found asbestos in the Cashmere Bouquet
13 product?

14 A. Yes, sir.

15 Q. And have you included those in your reliance
16 materials?

17 A. I have.

18 Q. And who are some of the other laboratories?

19 MR. MULARCZYK: Objection. Hearsay.

20 THE COURT: Overruled.

21 THE WITNESS: Besides McCrone, you have -- oh,
22 god, I'm having a mental...

23 There's -- there's -- I'm sorry.

24 BY MR. SATTERLEY:

25 Q. Yeah, you've got your binders there.

1 A. Yeah, let me just look.

2 Q. It's not a memory test.

3 A. I'm trying to go off -- yeah, test -- memory
4 test.

5 Mt. Sinai. We have, you know, some of the FDA
6 work in the early years. Johns-Manville. Cyprus, I
7 believe, did some testing. So there was some others.

8 Q. Is -- did Johnson -- in your materials, did
9 Johnson & Johnson --

10 A. Johnson & Johnson, too. I'm sorry.

11 Q. And Fred Pooley, specifically?

12 A. Yes, sir.

13 Q. And Mark Floyd at Forensic Analytical, did --
14 does his lab at Hayward look at Cashmere Bouquet and
15 found asbestos?

16 A. I believe so.

17 Q. Now, heavy liquid separation. Historically,
18 you mentioned Dr. Pooley did heavy liquid separation
19 and found asbestos in talc; correct?

20 A. Correct.

21 Q. You mentioned that -- and we showed
22 documents -- at Dartmouth, Dr. Reynolds looked at
23 heavy liquid -- heavy liquid separation and found
24 asbestos in talc?

25 A. Correct.

1 Q. Have you reviewed the test, the test results --
2 excuse me -- the testimony of Dr. Alice Blount?

3 A. I have.

4 Q. And have you seen her published paper?

5 A. Yes, sir. In 1990, 1991, peer-reviewed
6 published paper doing the exact same thing.

7 Q. And using the heavy liquid separation, did
8 Dr. Blount report and publish upon asbestos in talc
9 products?

10 A. Yes, sir.

11 Q. And specifically into evidence is Exhibit 160,
12 is the letter from Dr. Blount to one of the attorneys
13 for Johnson & Johnson in 1998.

14 And have you considered this with regards to
15 Sample I?

16 A. Yes, sir, I have.

17 Q. And in 1998, this letter indicated that
18 Sample I was Vermont, Johnson & Johnson talc; correct?

19 A. Yes, sir. It was a Johnson & Johnson
20 off-the-shelf product. And in that time period, it
21 would have been from Vermont. 1989, 1990, the talc
22 source was Vermont during that time.

23 THE COURT: Mr. Satterley, I neglected to write
24 down the exhibit number. I don't know whether you said
25 it or not.

1 MR. SATTERLEY: 160, Your Honor.

2 THE COURT: Thank you.

3 BY MR. SATTERLEY:

4 Q. And you understand that -- Dr. Blount to be a
5 geologist/mineralogist?

6 A. Yes, sir.

7 Q. And have you considered her, not only her
8 published work but her testimony and her handwritings
9 and her letters back in the '90s regarding her testing
10 of this product?

11 A. In her published paper.

12 Q. Okay. So we've got Dr. Pooley, Dr. Reynolds,
13 Dr. Blount, Lee Poye, and MAS, your lab. In all five
14 of those instances, when heavy liquid separation was
15 done with regards to looking for asbestos in cosmetic
16 talc products, were asbestos identified?

17 MR. CALFO: Objection, Your Honor. There is no
18 foundation for -- for all those.

19 THE COURT: It's overruled.

20 THE WITNESS: Yes, sir. Asbestos was
21 identified using the heavy liquid density separation
22 method, both the protocol, or the method, for TEM as
23 well as PLM, where we actually used the Blount method
24 that she published in 1990.

25 BY MR. SATTERLEY:

1 Q. Now, in all the materials you reviewed, have
2 you seen, since the Blount publication -- since the --
3 in -- in the early 1990s -- have you seen Johnson &
4 Johnson testing where they tested their talc by heavy
5 liquid separation at any time in the last 28 years,
6 since that paper was published?

7 A. No, sir, I've never seen any documents saying
8 that they were using...

9 Q. At any point in time, have you seen any
10 documents that Colgate-Palmolive or any of their
11 analysts tested their talc by using the heavy liquid
12 separation method?

13 A. No, sir.

14 Q. Now I want to talk about negative tests.

15 You mentioned limitations of XRD. Tell us your
16 opinion about reports regarding XRT -- XRD that report
17 nondetect, from an analytical standpoint, for the
18 identification of asbestos in talc. What does that
19 mean to you?

20 A. It means that the concentration of asbestos, if
21 present, wasn't greater than the detection limit,
22 which, for XRD, is pretty high, depending on what
23 you're looking at.

24 So your detection limit in XRD is probably -- a
25 really good XRD with good technicians may be for

1 tremolite .2, .3 percent by weight. Today, you may get
2 down to .1. But in the '70s, it was around .4, .5.

3 Anthophyllite is even higher, and so is
4 chrysotile.

5 So using XRD and getting a negative in XRD only
6 tells you is -- there's not a -- really a lot of
7 asbestos in here, and that's it.

8 Q. With regards to the use of XRD, have you
9 studied the -- what's called the J4-1 method?

10 A. Yes, sir.

11 Q. And is it your understanding that the J4-1
12 method was a method adopted by industry -- the
13 Cosmetics, Toiletries and Fragrances Association -- in
14 1976?

15 A. Yes, sir, it was.

16 Q. And did the J4-1 method have the x-ray
17 diffraction as the first step in the process?

18 A. They did.

19 Q. And did J4-1 method -- did the J4-1 method ever
20 include a TEM analysis?

21 A. No, sir.

22 Q. Did the J4-1 method ever include heavy liquid
23 separation?

24 A. It did not.

25 Q. Did the J4-1 method have a stop, you stop

1 analyzing, if you don't find anything by x-ray
2 diffraction or optical microscope?

3 A. I'm sorry. Could you repeat that?

4 Q. Sure. Let me just show you what's already into
5 evidence. It's 727.

6 This is the -- this is the J4-1 -- the actual
7 J4-1 method into evidence. It says "J4-1" over here.
8 Over here.

9 A. Yes, sir. I'm familiar --

10 Q. You recognize that, sir?

11 A. I'm familiar with this document.

12 Q. Okay. And at the bottom, it's got, "x-ray
13 diffraction" here, "acid leach" over here, "optical
14 microscopy," and then "fibrous morphology," and "stop.
15 Stop. Stop."

16 Do you see that?

17 A. Yes, sir.

18 Q. All right. So your understanding of the way
19 the J4-1 method works is, if you don't find anything in
20 the --

21 A. X-ray diffraction.

22 Q. -- x-ray diffraction showing amphibole, you
23 stop; correct?

24 A. Correct.

25 Q. Okay. So -- but if you do find a peak, then

1 you would go over to the optical microscopy and look
2 for fibrous materials; correct?

3 A. Correct.

4 Q. And if you don't find anything, you stop?

5 A. Correct. Well, if you do find, you stop. It
6 says, "Asbestiform amphiboles present." If you don't
7 find it, it's stop to the right, which says
8 "Asbestiform amphiboles absent."

9 That's -- so it was "as soon as you find a
10 negative test, you stop" type of protocol.

11 Q. Based upon analytical techniques and what was
12 known, do you have an opinion whether or not this was
13 an appropriate technique for the already -- the
14 identification of asbestos?

15 MR. CALFO: Objection, Your Honor. This
16 witness had no knowledge of what was known in the '70s.

17 THE COURT: That's overruled. He may opine.
18 You can cross-examine him about it.

19 THE WITNESS: It's an appropriate method to
20 find out information, but you have to be very careful
21 with it, if you understand the detection limits. There
22 is products out there that has enough asbestos in it
23 that it's fine.

24 But when you're dealing with cosmetic talcs and
25 you're dealing with trace levels, the XRD method is --

1 should be done with -- very carefully.

2 Today, it's -- I don't think it's worthwhile to
3 analyze by XRD at all for Italian and Vermont talcs.
4 It doesn't give you -- even if it's positive, you can't
5 determine if it's fibrous or not because it doesn't
6 give you morphology. So why do it?

7 BY MR. SATTERLEY:

8 Q. Exhibit 171 is the CTFA minutes, 1977. And it
9 says, with regards to the J4-1 method --

10 First of all, just -- you -- you've looked --
11 you reviewed the CTFA minute meetings; correct?

12 A. Yes, sir, I have.

13 Q. It says, with regard to the J4-1, "Test and
14 verify CTFA Method J4-1 for this purpose: Assurance
15 that method is accurate, reliable, and practical. He
16 reported" -- "He then reported these objectives have
17 not yet been achieved."

18 And it's reported in 1977 that six out of the
19 seven labs failed to identify spiked talc with
20 asbestos; correct?

21 A. With tremolite.

22 Q. And from an analytical standpoint, does this
23 demonstrate the inadequacies or the weaknesses of the
24 XRD method?

25 MR. CALFO: Objection, Your Honor. Calls for

1 speculation on the part of this witness.

2 THE COURT: Overruled.

3 THE WITNESS: Yes. It has -- it has detection
4 elements. So if you do a spiked sample and you can't
5 find it, then how can -- for this particular asbestos,
6 how can you find it in an unknown sample?

7 It's -- it's just not a very good method for
8 these types of analysis of cosmetic talc. Even today,
9 with state-of-the-art equipment, the concentrations
10 that are typically present are going to be lower than
11 what the XRD can see.

12 And couple that with the fact you can't tell if
13 it's fibrous or not, is -- is an issue.

14 BY MR. SATTERLEY:

15 Q. And it's referring to a "Dr. Schelz,"
16 S-c-h-e-l-z, "then proposed a round-robin partial
17 retest."

18 Do you see that?

19 A. Yes, sir.

20 Q. And then I'd like to show you what's into
21 evidence and what you considered, 233. This is
22 Johnson & Johnson document, March 1, 1978, to Charles
23 Haynes at the Cosmetics, Toiletry and Fragrance
24 Association.

25 And it's talking about the -- "I'm enclosing a

1 table which breaks the code for the recently completed
2 CTFA task force on round-robin testing of the consumer
3 talcum products for asbestiform amphibole minerals."

4 Do you see that?

5 A. Yes, sir, I do.

6 Q. It says, "The names and addresses and phone
7 numbers are also included for those individuals who
8 participated whose products were involved."

9 Do you see that?

10 A. Yes, I do.

11 Q. And he -- he writes in this confidential 1978
12 memo, which is Exhibit 233, "Please contact me" -- and
13 there's a phone number -- "upon receipt of this letter
14 so that I may destroy the only other copy of this
15 table, which is in my possession."

16 Have you ever seen, Dr. Longo, the table that
17 would break the code regarding the round-robin?

18 A. No, sir.

19 Q. It says on the second -- on this Johnson &
20 Johnson letterhead, second page, "Destroy your copy of
21 the table. Your participation in the final important
22 phase of the round-robin is appreciated. Thank you
23 very much.

24 "Sincerely, John P. Schelz, Chairman, CTFA task
25 force on round-robin testing of consumer talcum

1 products."

2 Do you see that?

3 A. Yes, I do.

4 Q. And he carbon copies the vice-president of
5 science of the CTFA, Dr. Estrin; right?

6 A. Yes, sir.

7 Q. And also someone from the Bristol-Myers
8 Products Company; correct?

9 A. That is correct.

10 Q. And on the last document, Ms. Clancy points out
11 that John Schelz is identified as the chairman of the
12 CTFA task force.

13 Do you see that?

14 A. I do.

15 Q. Now, you've seen and evaluated many documents
16 from Johnson & Johnson, or their consultants, where it
17 says "nondetect."

18 Have you --

19 A. I have.

20 Q. -- not?

21 A. Yes, sir, I have.

22 Q. And have you identified and seen many documents
23 where it says they're looking for asbestos and they're
24 saying "nonquantifiable"?

25 A. I have.

1 Q. How can -- if you are of the opinion that
2 there's asbestos in these cosmetic talc products, how
3 can that possibly be when there are so many documents
4 that say "nondetect"?

5 MR. MULARCZYK: Calls for speculation.

6 MR. CALFO: It calls for speculation from this
7 witness.

8 THE COURT: That's overruled.

9 THE WITNESS: It's all about the sample
10 preparation and detection limit, the reason you would
11 have a nondetect. And there is a lot of nondetect
12 analysis by TEM for Johnson & Johnson. But it's all
13 about the detection limit.

14 If you set -- if you have a detection limit
15 that is higher than most, anytime that others,
16 including me, have found asbestos in the product, then
17 it's not surprising. If your method is not sensitive
18 enough, you're not going to detect it. You have to
19 have -- if your detection limit is up here but your
20 asbestos level is down here -- and think of a line,
21 can't find it if it goes below this detection limit --
22 and it's down here, you're going to have negative after
23 negative after negative. When you do find it, you've
24 hit those one or two samples that has a very high
25 concentration of asbestos in it.

1 It's all about the sample preparation and how
2 you do the analysis. If you can have a really
3 sensitive method or not.

4 Q. You talked about the tools you use. As a
5 demonstrative, I have two tools. I've got a bathroom
6 scale that I got at Walgreen's.

7 Do you see it says "Walgreens" on it there?

8 A. Yes.

9 Q. And I've got this type of scale, which -- what
10 do you call this type of scale?

11 A. I would call that a jeweler scale.

12 Q. And if we --

13 A. A not -- a "not very sensitive one" jeweler
14 scale. But it should work for what you're doing.

15 Q. So, for example, in thinking about detection
16 limit, if we have this -- and I've got a half-full box
17 of paperclips -- and we put it on the scale, the
18 bathroom scale I got at Walgreen, does it detect
19 anything?

20 A. No. It's not -- it doesn't have a sensitive
21 detection limit.

22 Now, you would -- not looking what's there, you
23 didn't know that, you would report that there's nothing
24 there. There's nothing on the scale. But that doesn't
25 make that half a box of paperclips disappear. So you

1 can't say there's nothing there unless you know what
2 your detection limit is, et cetera. It's all about the
3 sample prep.

4 Q. This one I don't know how to use.

5 A. Don't forget -- don't forget the tear button.

6 Q. Okay. So let's move this off here. And put
7 this on.

8 MS. CLANCY: True it.

9 BY MR. SATTERLEY:

10 Q. True it.

11 All right. Let's see what happens here.

12 Now, this scale is more sensitive. Does it
13 detect and pick up the same paperclips that we couldn't
14 pick up with the bathroom scale?

15 A. Yes, sir. It's more sensitive, so now you have
16 a scale that has a better, more sensitive detection
17 limit. And that's what we have done and others have
18 done using this concentration method to increase the
19 sensitivity.

20 Q. Now -- so the two expressions, or the two --
21 does "ND," does that stand for nondetect?

22 A. Correct.

23 Q. Like you -- there's many reports that say
24 nondetect with regard to samples; correct?

25 A. Correct. When they did the analysis, they did

1 not detect any asbestos. So they put in, you know, ND.

2 Q. And then there's NQ.

3 What does "NQ" represent?

4 A. In these tests, because you don't see this very
5 often at all, NQ would mean nonquantifiable.

6 Q. And are you familiar with the test method
7 written by Johnson & Johnson called 7024, TM7024?

8 A. Yes.

9 Q. And have you analyzed in great detail the Test
10 Method 7024?

11 A. Yes, sir, I have. It's a TEM method.

12 Q. And the 7024 method for the identification of
13 asbestos, in your opinion, does it have limitations?

14 A. Yes, sir, it does.

15 Q. And what limitations does the TM7024 have?

16 A. Well, you start off with the biggest one. It
17 doesn't use the heavy concentration method to prepare
18 the sample.

19 So you have to dilute the sample, say -- again,
20 we'll go back to the 30 or 40 milligrams.
21 50 milligrams talc. In order to make it where you can
22 get it on these little TEM grids, you may have to
23 dilute that a thousand times.

24 So you start off with that. The second problem
25 with it is that it uses this "got to find five fibers."

1 And because you dilute it so much, it doesn't allow
2 you -- let me go back before that.

3 It doesn't allow you to expand the area you're
4 looking at.

5 So, if we're in this courtroom and we're
6 looking for our -- you got a -- a good example of this:
7 You got an acre of grass, high grass, and somebody asks
8 you, can you go find the ten golf balls that might be
9 out there? But we're only going to let you look at
10 this little area over here and see if you find
11 anything.

12 Well, that's what happens with this method.
13 You're looking at these little TEM grids and it doesn't
14 allow you to expand the area to keep looking to see if
15 you can get a better sensitivity.

16 So, if I'm only allowed to look at a little
17 area of that one acre versus walking around the whole
18 acre, which -- which one of those tests have I -- have
19 a better chance to run into those golf balls?

20 And that's the second problem with this. They
21 give you a time limit to how long you can spend doing
22 the analysis.

23 Q. Well, let me -- let me -- so time limit.

24 But let me go back to this.

25 You said five fiber requirement?

1 A. Of any one type of asbestos.

2 Q. Explain that.

3 A. Well, if I analyzed the sample, with all the
4 limitations it has on it, and I find four tremolite
5 fibers, they will say that is nonquantifiable because
6 you have to find five to make it, quote, above
7 background.

8 Not even -- to me, it even makes it a little
9 bit worse. If you find four tremolite asbestos fibers
10 and four actinolite asbestos fibers -- now, those two
11 are related; a little bit more iron in the tremolite
12 chemistry will give you actinolite -- you still say
13 it's nonquantifiable because you didn't have five
14 actinolite and five tremolite or more. Now, say you
15 have four tremolite, four actinolite, and four
16 anthophyllite asbestos. It's still nonquantifiable
17 because you don't have five of each.

18 So, instead of just going, okay, here's what it
19 is, we found these five, this is the concentration, but
20 we don't believe it's above background, even though
21 there is no background of this, that would be a way to
22 at least give you the information and make a decision,
23 but the reports just say nonquantifiable.

24 Q. And have you seen instances where an analyst at
25 McCrone named Kent Sprague writes letters regarding

1 analysis of talc and says, there's no asbestiform
2 minerals there, but we see the backup sheet and the
3 backup data and we see, in fact, that there was
4 asbestos present?

5 A. Yes, sir.

6 Q. This is Exhibit 174, which is into evidence.
7 And, for example, this letter right here, Exhibit 174,
8 is dated 1990. And Kent Sprague reports no
9 quantifiable asbestiform minerals; right?

10 A. Yes, sir.

11 Q. All right. And in this instance, we have some
12 of the backup data. A count sheet. And by the way, in
13 most of the reports where it says nonquantifiable, do
14 we have the backup data?

15 A. No. Just about all of them we do not.

16 Q. There's only a few examples of the backup data,
17 the count sheets like we've got here?

18 A. Yes, sir.

19 Q. All right. In this backup data, does it
20 demonstrate anthophyllite present?

21 A. It does.

22 Q. And does it give the length and the width?

23 A. Yes. The length is 20 and a width is 1.5,
24 which is probably more likely than that a bundle. And
25 if you divide 20 by 1.5, you would have an aspect ratio

1 of about 7 and a half to 1.

2 Q. And in -- would that -- does that meet the
3 definition, anthophyllite, of regulated asbestos?

4 A. Yes, sir. It meets that definition as well as
5 the aspect ratio definition of the 7024 method.

6 Q. And so is this an example of, if you just rely
7 upon the report that says no quantifiable asbestos and
8 don't have the backup data, you would be misled into
9 believing there's no asbestos present?

10 MR. CALFO: Objection. Calls for speculation
11 on the part of this witness.

12 THE COURT: That's overruled.

13 THE WITNESS: Yes, sir. It would be very
14 unclear what that -- for somebody like me very unclear
15 what that means, nonquantifiable. It's either you can
16 count it or you -- or it's not there and you don't.

17 BY MR. SATTERLEY:

18 Q. And in this specific sample also -- we go a
19 couple pages over. Chrysotile. The structure is a
20 fiber. Type is chrysotile. And the length and the
21 width. And it says SAED -- SAED and EDS checked off
22 yes; right?

23 A. Yes, sir.

24 So, again, it's chrysotile asbestos and it --
25 they have all the right boxes checked for it to be

1 asbestos.

2 Q. And the next page -- and, in fact, at the
3 bottom of the next page it says "chrysotile fiber";
4 correct?

5 A. Yes, sir.

6 Q. All right. So in this one -- in this one
7 letter where it says no asbestiform by McCrone, the
8 McCrone Group, no quantifiable amounts of asbestiform,
9 we have two instances of asbestos, chrysotile asbestos
10 fiber and anthophyllite asbestos fiber; correct?

11 A. That is correct.

12 Q. That's Exhibit 174.

13 Now, the -- back to the method. The 7024.
14 It's into evidence as Exhibit 172. It's the actual
15 J&J Method 7024.

16 You've read this in detail; correct?

17 A. I have.

18 Q. And this is a J&J method specification;
19 correct?

20 A. Yes, sir, it is.

21 Q. Background correction. Now, what is that?

22 A. Background correction is that there is stray
23 asbestos fibers floating around in the air that somehow
24 gets on the sample and could confound the results. Or
25 that your laboratory you're using or your lab you've

1 got cross-contamination because you've got some stray
2 asbestos fibers getting in with the analysis.

3 So they call it background correction.

4 Q. And in the protocol and specification, what
5 does J&J say about background correction? Says it has
6 not been necessary. How is that significant or
7 important?

8 A. Well, it's significant because it verifies the
9 same thing we say. For these types of asbestos,
10 tremolite, actinolite, anthophyllite -- you do not have
11 background levels of this material. It's not used
12 in -- in very few asbestos products. Labs don't
13 typically have that poor of laboratory use that they
14 will cross-contaminate. So there's no such thing as
15 a -- ambiguous background level. Asbestos fibers are
16 heavier than air. They do not stay in the air for
17 eternity. They fall out, obeying the basic laws of
18 gravity. You don't have this, quote, background
19 causing contamination levels that somehow interfere in
20 your analysis. And I agree with that. We have seen no
21 background contamination in any of the processed
22 blanks, any of the QCs that we've done on any of these
23 samples. The filters doing the exact same type of
24 analysis are clean, so, therefore, below detection
25 limit of the analysis.

1 Q. So you're running blanks to make sure you don't
2 have contamination in the lab?

3 A. Correct. Blanks. Processed blanks where you
4 do the exact same thing you did to the sample you're
5 analyzing, except you don't put talc in it: heavy
6 liquid, centrifuge, the whole thing. And we analyze
7 the exact same area.

8 Q. So with J&J, when they say, "Background
9 contamination" -- "Background correction has not been
10 necessary, the amount of background asbestos detected
11 has been insignificant in comparison to the levels of
12 asbestos found in contaminated samples," do you agree
13 with that?

14 A. I agree that it's been insignificant. It's --
15 essentially, in our lab and others, it doesn't exist.
16 So it does not interfere with the analysis. So when
17 you find a single fiber or a single bundle in the
18 analysis of tremolite, actinolite, anthophyllite, it is
19 significant. It shows that that came from the cosmetic
20 talc itself and not from some stray contamination out
21 of the lab, in the air from somewhere, what -- whatever
22 it may be.

23 Q. Last question before lunch.

24 MR. SATTERLEY: Can I get one more question in,
25 Your Honor.

1 THE COURT: I was going to cut you off right
2 there.

3 MR. SATTERLEY: I saw you were going to cut me
4 off.

5 THE COURT: I was going to. One important
6 question.

7 BY MR. SATTERLEY:

8 Q. It's preparation and analysis time.
9 Preparation time per sample, including preparation of
10 related materials is one hour.

11 In your opinion, Dr. Longo, is that reasonable?

12 A. Not for what we do on the heavy liquid
13 separation, on the preparation, one hour. We don't --
14 we don't give time limits to our scientists at the
15 laboratory to either prepare a sample or to analyze the
16 sample. Their only requirement is to do it right.

17 MR. SATTERLEY: Now would be a good time for
18 lunch, Your Honor.

19 THE COURT: Ladies and gentlemen. We are going
20 to go to lunch and come back at 1:30.

21 Remember the admonition that it is your duty as
22 jurors not to converse amongst yourselves or with
23 anyone else on any subject connected with the trial or
24 to form or express any opinion thereon until the matter
25 is submitted to you.

1 Enjoy your lunch. See you back in an hour and
2 a half.

3 (Whereupon, the jury having exited the
4 courtroom, the following proceedings were held:)

5 THE COURT: The record will reflect that the
6 jurors have departed the courtroom.

7 Is there anything you need to talk about?

8 MR. SATTERLEY: Not from the plaintiff's
9 perspective, Your Honor.

10 MR. CALFO: No, Your Honor.

11 MR. MULARCZYK: No, Your Honor, thank you.

12 THE COURT: All right. I will see you at 1:30.

13 THE WITNESS: Thank you, Your Honor.

14 (Lunch break taken.)

15 **(Afternoon Session)**

16 (Whereupon, the following proceedings were held
17 outside the presence of the jury:)

18 THE COURT: All right. We're back in session.

19 Is everybody here?

20 Okay. All counsel are here, it appears.

21 Ms. Hill, please bring in the jury.

22 (Whereupon, the jury having entered the
23 courtroom, the following proceedings were held:)

24 THE COURT: Good afternoon, ladies and
25 gentlemen. The record reflect will that the jurors are

1 all in their preassigned seats, counsel is at counsel
2 table, and Mr. Longo is back in the witness box.

3 You will recall you're still under oath?

4 THE WITNESS: Yes, Your Honor.

5 THE COURT: Mr. Satterley, you may continue
6 with your direct examination of this witness.

7 MR. SATTERLEY: Good afternoon, Dr. Longo.

8 Good afternoon, everyone.

9 THE WITNESS: Good afternoon.

10 BY MR. SATTERLEY:

11 Q. We left off talking about the Johnson & Johnson
12 TM7024 and the -- where we were talking about the
13 preparation and analysis time. I read to you,
14 "Preparation time per sample, including preparation of
15 related materials, is one hour."

16 How long does the prep time take in your lab
17 for heavy liquid separation analysis?

18 A. Probably two hours. Two to three hours to do
19 multiple samples.

20 Q. It says, under this J&J method, TM7024.
21 "Analysis search time." Search time. Does that mean
22 looking under the microscope looking for the asbestos
23 fibers or bundles?

24 A. Yes, sir.

25 Q. It says, "The search time per sample is a

1 maximum of two hours."

2 Correct?

3 A. That's what it states.

4 Q. And, from an analytical point of view, you
5 believe it's appropriate, or -- is it even possible to
6 find 20 different asbestos fibers or bundles in a
7 two-hour time frame?

8 A. No. That would be impossible.

9 Q. Is it appropriate, in your view, to put an
10 arbitrary time limit like two hours for searching for
11 asbestos in a sample?

12 A. No. Because, to me, that puts pressure on the
13 microscopist to get done. It's more preferable to let
14 the microscopist take the time he needs till he feels
15 satisfied that he has an adequate search and/or
16 adequate analysis. A sample that may have 15 or 20
17 asbestos fibers in it, it'd probably take two full
18 days.

19 Q. Also on the Exhibit 172, under Section 13,
20 there is a -- I got this one highlighted. This is
21 still 172. Page 7. I'm going to figure this thing out
22 eventually.

23 Under definition of fiber: It says, "An
24 elongated particle with parallel sides and an aspect
25 ratio K" -- oh, "greater than 3 to 1."

1 Do you see that?

2 A. Yes, sir.

3 Q. Is it your understanding that's Johnson &
4 Johnson's definition of a fiber, that's greater than
5 3 to 1?

6 A. Yes, sir.

7 Q. And in some of the regulatory definitions, does
8 regulatory -- some of the regulatory definitions
9 describe a fiber as being greater than 3 to 1?

10 A. Well, that's greater than or equal to 3 to 1.
11 Some of the OSHA documents for fibers are greater
12 than -- greater than or equal to 3 to 1. So that
13 follows along the Federal Government on occupational
14 exposure for sizes of the fiber -- for the aspect ratio
15 of the fibers.

16 Q. And it says, "The definition employed may vary
17 with the needs of the client."

18 Do you see that?

19 A. Yes.

20 Q. Have you seen in any of the regulatory
21 framework -- whether it be OSHA, EPA, ISO -- that the
22 definition of what a fiber is needs to vary depending
23 upon who the client is or what the client needs?

24 A. No. There's two definitions of fibers on
25 aspect ratios. One is greater than or equal to 3 to 1

1 for occupational exposure analysis and the other one is
2 the standard TEM analysis where it's greater than or
3 equal to 5 to 1 aspect ratio. Those are the only two
4 aspect ratios that I know of for optical microscopy or
5 transmission electron microscopy.

6 Q. This 7024, this method that we've been talking
7 about, is this generally accepted in the scientific
8 organizations as a proper way to analyze samples for
9 the presence of asbestos?

10 A. It's not in any of the standard protocols.
11 Using this type of method it has evolved since then.
12 And it's -- you know, in order to be fair, there's been
13 this running debate, is it McCrone's method or is it
14 J&J's method, depending on who you ask.

15 Q. The -- let's switch gears now and take this to
16 the side, and let's go to -- let's go to testing and
17 testing results.

18 What is the NIST or the NIST standard?

19 A. That is the National Institute of Standard and
20 Technology, and all laboratories that are certified or
21 doing this work should have a NIST standard for all the
22 regulated asbestos. They sell you a bottle of
23 tremolite asbestos that's certified by the National
24 Institutes of Standard and Technology, and a bottle of
25 anthophyllite, chrysotile, amosite, crocidolite. And

1 it's a requirement to have these standards in your lab
2 for your certifications.

3 MR. SATTERLEY: May I approach, Your Honor?

4 THE COURT: You may.

5 BY MR. SATTERLEY:

6 Q. This is marked for identification purposes only
7 as 1046. Is this a NIST standard of tremolite asbestos
8 that your laboratory has and photographs were taken by
9 your laboratory?

10 A. Yes. This is our NIST standard for tremolite
11 and those are our photographs.

12 Q. And we're going to display now the 1046. And
13 it's hard to see. But does it say "1867 bulk asbestos
14 uncommon" and then identifies tremolite?

15 A. Yes.

16 Q. And did your laboratory take the NIST standard,
17 put it under the TEM, and take photographs of it so
18 that we could see what the standard tremolite asbestos,
19 according to the National Institute of Standards and
20 Technology, what it looks like?

21 A. Yes.

22 Q. If we go to the second page of 1046, do the
23 photographs reflect -- reflected here represent
24 tremolite that your laboratory took from the tremolite
25 standard of the National Institute of Standards and

1 Technology?

2 A. Yes. Those are two asbestos tremolite
3 structures on the left-hand side, and on the right-hand
4 side is the corresponding chemistry for the --
5 essentially the pattern that tremolite has for the one
6 on the very -- the very tall one is silicon and then --

7 Q. This right here?

8 A. Yes.

9 And then magnesium and then calcium.

10 Q. This?

11 A. And then sometimes a little iron to the further
12 on the right.

13 Then that really big peak all the way to the
14 right is copper, because it's on a copper grid.

15 Q. That's the grid itself?

16 A. Correct.

17 Q. And you said iron. Is this a little iron peak
18 there?

19 A. Yeah. Sometimes it's there, sometimes it's
20 not.

21 Q. And this right here, that I put my -- that's
22 the calcium?

23 A. Correct.

24 Q. And is that calcium distinguish tremolite from
25 anthophyllite or talc?

1 A. It does.

2 Q. If you had no calcium there and you had this
3 pattern, would that be consistent with anthophyllite?

4 A. It would be -- yes. It would be close to
5 anthophyllite or fibrous talc.

6 Q. And is fibrous talc and anthophyllite
7 chemistry, the chemistry of it, substantially similar?

8 A. It is.

9 Q. And by the way, the photographs that we're
10 seeing here on this NIST standard, is this a -- a
11 fiber?

12 A. No. The -- both those, in my opinion, based on
13 the photographs, are bundles of fibers.

14 Q. And what is it about the photograph, the
15 appearance, that represents it as a bundle of fibers?

16 A. Well, it's kind of hard to see from this far
17 back, but on the bottom right-hand end, you'll see what
18 looks like almost little protrusions sticking out of
19 the bottom. If you can then see this under the
20 microscope, you can see the striations that these are
21 individual fibers all packed together. And that's the
22 definition of a bundle: parallel fibers that are
23 touching, not spread apart.

24 And the top one the same thing. This one's a
25 little different in that you can see one, two, three,

1 four, five, six, a number of individual fibers, and you
2 have one long one on the top right-hand side.

3 So these would be two bundles of tremolite
4 asbestos.

5 Q. And then the last page, on the NIST standard,
6 does it show the diffraction pattern or the selected
7 area electron diffraction image?

8 A. Yes.

9 Q. And we heard from Mr. Poye about this the other
10 day. But can you just remind us again. What are we
11 seeing in here and how do we know this is an amphibole
12 or asbestos based upon this diffraction pattern?

13 A. Well, nobody -- at least we don't -- just base
14 something on a diffraction pattern. We look at three
15 things: The morphology. Is it fibrous? Does it meet
16 the definition? Very important, the microchemistry.
17 Does it have a tremolite chemistry, the right ratios of
18 magnesium, the calcium, and the one tall silicon peak?
19 And does it have an amphibole-type d-spacing -- that's
20 the -- that's the distance between the row of atoms --
21 that are consistent with tremolite?

22 So it's not just one thing. Everything goes
23 through a series of diagnostic tests. You know, A,
24 yes. It has the right morphology. It's fibrous.
25 Check.

1 Second, the chemistry. Does the chemistry
2 match? And tremolite is very distinct. Check.

3 Does it have an amphibole diffraction spacing
4 between the atoms that are in the range of what you
5 would expect for tremolite which are off standard x-ray
6 cards for x-ray diffraction? Check.

7 And there it is.

8 You can't -- you just can't rely on one thing.
9 You put it all together and it says, yes, by all the
10 standards, this is tremolite asbestos.

11 Q. Now, if somebody were to say, Dr. Longo, wait a
12 second, you didn't measure the space and do what's
13 called a zone-axis measurement of this, so how can you
14 possibly know that's an amphibole pattern, because you
15 didn't measure it? Is that a fair criticism, in your
16 view?

17 A. Absolutely not.

18 Q. And why -- why do you say that?

19 A. You don't need a zone-axis diffraction pattern.
20 If all's you had was a diffraction pattern and no
21 chemistry to go along with it, then, yes, you need to
22 do at least one zone-axis diffraction, and you have --
23 and that's how microscopists would have done it in the
24 '70s and early '80s before EDXA or the microchemistry
25 got so good, for lack of a better word. So you don't

1 need that. It's not required in any of the standard
2 protocols to do that.

3 Q. Did George Yamate, years ago, 30 years ago,
4 suggest zone-axis measurements?

5 A. George Yamate said for EPA Level 3, and if it's
6 going to be a -- if it's going to be a legal case, you
7 need to do zone -- you need to do a couple zone-axis
8 diffraction patterns to verify.

9 Q. Now, I'm going to switch gears back to -- away
10 from the standard to the -- your testing, actually.

11 Do you -- do you employ the methods for the
12 identification of asbestos that have been recognized,
13 the International Standard Organization methods, the
14 other methods, for the proper identification of
15 asbestos?

16 A. Yes.

17 Q. And have -- did you employ -- you and your lab
18 employed those clearly-defined methods in the
19 identification, in the characterization of asbestos in
20 talc?

21 A. Yes, we did.

22 Q. Anywhere, in any of the methods that you
23 examined for the identification of asbestos in talc, is
24 there a requirement that you do what's called a, quote,
25 backscatter analysis?

1 A. No.

2 Q. If somebody were to come to this courtroom and
3 say, I'm state of the art, I use backscatter analysis
4 and I can determine there's no asbestos here because
5 the backscatter analysis that I use, is that in any
6 method whatsoever for the identification of asbestos?

7 A. No. That would not be, in my opinion, a -- a
8 method used to identify different types of asbestos.
9 That was not -- backscatter detectors and transmission
10 electron microscopes were never designed to do
11 irregular surfaces like asbestos fibers. It has to
12 be -- we did it in graduate school. It has to be a
13 polished surface so you can see all the different
14 orientations of the crystal. If it's round like
15 asbestos fiber or bundle, it is very difficult to
16 identify without numerous standards, and that's even in
17 the published papers about that.

18 So it's not recognized in any -- any agency as
19 a method for the identification of asbestos.

20 Q. So let's -- let's jump right into the -- these
21 books. You have binders over -- box -- two boxes of
22 binders next to you, do you not, Doctor?

23 A. Yes, sir.

24 Q. And within the -- the binders -- and these are
25 already admitted into evidence.

1 Just so the record is clear, I'm going to start
2 with the box that's got the J&J -- the box that J&J
3 tested.

4 A. Okay.

5 Q. Okay? And let's start --

6 By the way, did you and your laboratory look at
7 historical samples provided by J&J at J&J's lab over
8 the last several months, in the last year or so?

9 A. Probably the last year, yes.

10 Q. Let's take a step back before we get to these
11 real quick.

12 Originally a couple years ago, did you -- did I
13 provide you samples that I got from collectors -- from
14 one collector, and did other lawyers provide you
15 samples to look at that got -- purchased from eBay and
16 purchased -- or got from individual clients that had
17 claims, and did you analyze a whole bunch of J&J
18 products a couple years ago?

19 A. Yes.

20 THE COURT: Do you want to ask just one
21 question at a time.

22 MR. SATTERLEY: I'm sorry. I apologize,
23 Your Honor.

24 THE COURT: Go ahead. Just start over.

25 I don't know which one he answered there, but

1 go ahead.

2 THE WITNESS: Yes, yes, yes, and yes.

3 BY MR. SATTERLEY:

4 Q. Let me break it down.

5 A couple years ago, did I provide you three
6 samples?

7 A. Yes.

8 Q. Did I provide an affidavit from a collector?

9 A. Yes.

10 Q. Did you analyze those three samples that I
11 provided to you a couple years ago?

12 A. Yes.

13 Q. Did other attorneys from other law firms
14 provide you samples?

15 A. Yes.

16 Q. Did you -- some of those samples -- were some
17 of those samples that you understood were obtained off
18 eBay?

19 A. That is correct.

20 Q. And were -- some of those samples, did you
21 understand were obtained from individual clients that
22 had a claim against J&J?

23 A. Yes.

24 Q. Okay. And did you analyze all those samples in
25 2017, the fall of 2017?

1 A. Yes.

2 Q. And did you issue a written report with
3 photographs and -- and come to opinions and conclusions
4 about those -- those specific samples?

5 A. Yes.

6 Q. And were you examined by J&J lawyers in detail
7 about those samples?

8 A. A number of times.

9 Q. Okay. Did you do what's called a particle size
10 distribution to verify the particle size of the talc
11 and things in the samples?

12 A. Yes.

13 Q. All right. Did you -- subsequent to all that
14 work, the three samples I provided you, the eBay, the
15 clients, did we provide you samples that we got
16 directly from J&J?

17 A. Yes, sir.

18 Q. Okay. And before we got the samples from J&J,
19 directly from J&J, did J&J lawyers cross-examine you
20 and criticize you with regards to the samples that you
21 had off eBay?

22 A. Yes.

23 Q. Okay. Did they accuse of maybe -- or suggest
24 that the lawyers contaminated the samples?

25 A. Yes.

1 Q. Did they suggest maybe the samples were
2 contaminated in some -- by some other third party?

3 MR. CALFO: Your Honor, this is improper
4 direct.

5 THE COURT: May I see counsel at sidebar.

6 MR. SATTERLEY: In the interests of time, I'll
7 move on.

8 THE COURT: All right.

9 MR. SATTERLEY: Okay.

10 BY MR. SATTERLEY:

11 Q. Subsequent to -- to -- in the original analysis
12 you did, did you report, in your opinion, accurate
13 findings of all the asbestos you -- you found?

14 A. Yes, sir.

15 Q. And did you take photographs of them?

16 A. Yes.

17 Q. And did you take EDS of them?

18 A. We did.

19 Q. And did you take selected area electron
20 diffraction?

21 A. Yes, sir.

22 Q. All the backup data?

23 A. Yes.

24 Q. Okay. Now, subsequent to all that, did you
25 obtain directly from me or lawyers representing

1 individuals samples J&J provided from their historical
2 collection?

3 A. Yes, sir.

4 Q. Okay. And what we have in these binders -- do
5 you have in the binders results from some of the
6 historical samples that you've analyzed?

7 A. Yes, sir.

8 Q. And as a matter of fact, did Johnson & Johnson
9 also provide photographs and dates, if we go to the
10 1960s, the historical samples from the 1960s? This is
11 Exhibit 1080 in evidence.

12 So, for example, this one is a photograph of
13 one of the historical samples that your lab and
14 laboratory analyzed; correct?

15 A. Correct.

16 Q. And the way it worked was -- and you correct me
17 if I am wrong, but you -- your lab got just a very
18 small portion of each of the samples so that another
19 laboratory, a laboratory hired by Johnson & Johnson
20 lawyers, could look at those as well; correct?

21 A. That is correct.

22 Q. All right. And included in Exhibit 1080, do
23 you have -- you have photographs of your findings,
24 including photographs of PLM, TEM, and so forth?

25 A. Yes. Yes, that's correct.

1 Q. And do you have also the -- the EDS, the
2 chemistry, for example, the chemistry of what you
3 found?

4 A. Correct.

5 Q. Okay. And do you have the selected area
6 electron --

7 A. Yes.

8 Q. And so in the binder, Number 1080, are there
9 the identification -- photographs of the identification
10 of asbestos and fibrous talc in this binder?

11 A. Yes. The results are the photographs for both
12 the transmission electron microscopy as well as the
13 polarized light microscopy for positive samples,
14 typically using the Blount method for PLM.

15 Q. And many of the photographs, do they also --
16 the samples, have the date of the sample, according to
17 J&J? This was 1966 or '67, according to what they
18 provided to us?

19 A. Yes, sir.

20 Q. And let me just go through the record real
21 quick so that we have the record real clear.

22 The 1970s -- is that 1081 historical samples --
23 the photographs of the historical samples from the
24 1970s?

25 A. Yes.

1 Q. And did your lab and laboratory break the
2 samples down by sample numbers and have an M number,
3 M -- like, for example, M69042, is that a sample --
4 sample number that your lab analyzed?

5 A. Yeah. This would be our sample tracking
6 numbers, where -- when we log samples in, we go ahead
7 and give it a sample tracking number so that we can
8 keep track of it.

9 Q. And I'm going to come back to the '70s in a
10 little bit.

11 In the 1980s, did -- all the photographs of
12 asbestos that you found in the 1980s, is it
13 Exhibit 1082?

14 A. Yes, it is.

15 Q. And does it have -- are these true and accurate
16 photo- -- photographs of the -- of the asbestos
17 anthophyllite, tremolite, actinolite that you found --
18 you and your laboratory found in the Johnson's Baby
19 Powder in the 1980s?

20 A. Yes, sir.

21 Q. In the 1990s -- Exhibit 1083, does it have
22 photographs of nine different samples in the 1990s
23 where asbestos is identified, documented in -- in this
24 in this binder?

25 A. Yes, sir.

1 Q. And in the 2000s -- and this is going to be --
2 the 2000s, this is going to be Exhibit 1084. Are there
3 five different samples where photographs were taken
4 regarding the presence of tremolite and asbestos in the
5 2000s?

6 A. Yes.

7 Q. And did you -- have you also prepared and
8 provided to Johnson & Johnson a report on Chinese talc,
9 where you analyzed Chinese talc for the presence of
10 asbestos?

11 A. Yes, sir.

12 Q. And did you document asbestos from the Chinese
13 talc from Johnson's Baby Powder?

14 A. Yes.

15 Q. And the last binder is 1065. This is a
16 verification of Lee Poye's TEM analysis of J&J
17 historical Vermont Shower sample -- Shower to Shower
18 samples. And did you take photographs and verify the
19 presence of asbestos from Lee Poye's analysis?

20 A. Yes, we did.

21 Q. And he was here the other day, and he testified
22 that you and your lab verified 98 percent of asbestos
23 that he found in the Shower to Shower.

24 A. That is correct.

25 Q. Now, obviously, I'm not going to go through all

1 these pictures today. There are literally -- there's a
2 heck of a lot. So -- but I -- what I do want to do is
3 have you explain some things to us.

4 A. All right.

5 Q. And, for example, if you could go to the 19- --

6 Before I go to the 1960s, some of the samples
7 that you looked at, at the request of me and the other
8 lawyers, in 2017, were those samples going back into
9 the '50s and the '40s and the '30s, very old samples?

10 A. Yes, sir.

11 Q. Okay. And did -- did you document the asbestos
12 and take photographs of asbestos in those very old
13 samples?

14 A. I did.

15 Q. Okay. Now, the '60s -- if you could go to the
16 binders that's the '60s. And let's just pick out so we
17 can explain what PLM -- if you could tell me a tab
18 number that would explain what -- what PLM photographs
19 look like so we can talk about what you found.

20 A. Let's just go to Tab -- pick one here -- Tab 3.

21 Q. Tab 3. Okay. And we have page numbers at the
22 bottom.

23 A. That would be page 41.

24 Q. All right. So tell you what. I'm going to
25 take it out of the binder, make it easier for you.

1 There you go. It's hard to see because of the light.

2 MR. SATTERLEY: Your Honor, may I turn the
3 light off? Maybe -- I don't know if the reflection
4 will -- the front light here?

5 THE COURT: I don't think that's a reflection.

6 MR. SATTERLEY: Not going to work?

7 THE CLERK: I think it's the reflection from
8 the...

9 MR. SATTERLEY: It might be here, on...

10 Oh, there we go. That -- that helps out right
11 there. That helps out.

12 BY MR. SATTERLEY:

13 Q. Dr. Longo, what are we looking at?

14 A. This is a photomicrograph using polarized light
15 microscopy. And in this particular case, for this
16 sample here, the analyst identified this as
17 actinolite/tremolite.

18 Now, this is known as dispersion staining,
19 which is part of what happens in polarized light
20 microscopy. There is actually no staining involved.
21 It's just a matter of changing the characteristics of
22 the optical microscope, cutting the light down and
23 changing the F-stop.

24 And so what we're looking at is light being
25 refracted around the bundle under dispersion staining.

1 And because of the color of that light being refracted
2 around the fiber under -- under polarized light, it
3 gives you a certain color.

4 And that color there, you would say is sort of
5 yellowish-golden, and it's parallel to the light, so
6 that the light is coming in one direction, parallel to
7 it. And when it refracts around the bundle, it will
8 refract in this light -- in this -- they call it a
9 vibration, but it's actually the wavelength of light.

10 And the analyst will say, "Okay. That is a
11 goldish -- that is a yellowish-gold," and has a chart
12 that they look up and say, "Okay. At this color, it's
13 going to be this refractive indices," meaning 1.62 or
14 1.61.

15 And then he'll -- go to the next one. He'll go
16 to the perpendicular direction.

17 Q. The next slide?

18 A. The next slide.

19 Q. All right. So -- so this -- before --

20 A. That's -- you're putting a purple one on there.

21 That's not the next side. Turn it up --

22 Q. Oh, this way. Double-sided.

23 A. Turn -- turn the one you have upside down.

24 Q. Oh. All right.

25 A. Now, that is that -- that is the exact same

1 bundle. He's now rotated it so the light is going
2 through at a different direction, and you'll get a
3 darker reddish color there. And then he can do the
4 refractive indices, and say, "This is in the range of
5 actinolite/tremolite."

6 These analysts that I have -- this particular
7 person has been doing this for almost 30 years. He's a
8 geologist, trained at McCrone, or Walter McCrone's
9 group, back 30 years ago to do this. All our analysts
10 were trained by Walter McCrone many, many, many years
11 ago, because that's what they -- what he did, and this
12 is how -- the protocol.

13 So they look at this, and then they have some
14 other stuff that they do. Extinction angle. If you
15 keep turning it to some point, the light refracted
16 through the material will be the same as the light
17 around the material on a particular angle. So it
18 disappears. And when it disappears, they call it the
19 extinction angle.

20 And so tremolite and actinolite, if you turn it
21 slightly oblique, start going this way, it just fades
22 out. They'll go, "Okay. That's indicative of
23 tremolite/actinolite."

24 Then the refractive indices -- and then they --
25 and everybody likes the next one because it's such a

1 pretty color. It's called elongation. Now you can put
2 the purple up.

3 Q. Before I get the purple one out, let me just
4 ask a couple questions.

5 It says, "actinolite/tremolite." You -- and
6 you described this as bundles.

7 A. Yeah. Go back to the previous one.

8 Q. Well, I mean, why -- why can't -- why can't
9 this just be a cleavage fragment? This is a cleavage
10 fragment, Dr. Longo, isn't it?

11 A. No. No, it's not.

12 Q. Why not?

13 A. If you -- you can't quite see it from there.
14 If you look at it, you can see striations in the bundle
15 itself. I don't know if you can -- you actually see
16 lines going through it. It's hard to see on this one.
17 We'll get a better -- just because you're blowing it
18 up.

19 So it's difficult to see here, just because
20 you're blowing it up, but it actually has striations
21 going through it that make up this.

22 And it's large. This is 88.5 micrometers in
23 length. If you want to know the aspect ratio, you
24 don't measure the whole bundle. The protocol tells you
25 to measure the individual fibers.

1 And I know it's hard to see it. We might have
2 a better example, because it's bigger than this one.

3 So the aspect ratios on here are all running
4 about -- in this particular one between 160- and
5 200-to-1 aspect ratio. This is a bundle. This is not
6 a cleavage fragment.

7 And it's meeting the counting protocols for
8 aspect ratios greater than 5 to 1, individual fibers,
9 and, therefore, is a regulated asbestos bundle.

10 Q. The purple one that you -- this page 43 --

11 A. This is called elongation. When you turn it in
12 this direction -- you have to put another filter in
13 there. It's a 530-nanometer filter that, again,
14 changes the vibration of the light, gives you these
15 beautiful colors.

16 But it tells you how fast the light goes
17 through the crystal via the orientation, either this
18 way or that way. And if you switch it the other way,
19 it changes colors, and these particular colors will
20 tell you what type of asbestos this is.

21 So it's a very involved analysis.

22 Q. And is it your opinion that this is --

23 Let's zoom it back out.

24 -- tremolite?

25 A. Well, it's actinolite/tremolite. We don't

1 differentiate between actinolite and tremolite. You
2 have to --

3 Q. Under PLM?

4 A. Under PLM, because you have to go to another
5 RI, refractive indices, fluid.

6 And since both of those are regulated asbestos,
7 tremolite and/or actinolite, and actinolite is part of
8 the whole solid solution series of tremolite --
9 meaning, eons ago, when it all formed, what -- if there
10 was a little bit more iron present, you could get more
11 on the actinolite side; if there's less iron, you get
12 more on the tremolite side.

13 Since it's regulated, we don't go the extra
14 step.

15 Q. So on this particular one, this has got
16 M68503-009; right?

17 A. Right. And it has -- you can see the "BL" on
18 there. That means that was the Blount -- this is a
19 Blount PLM.

20 Q. You used the Blount method?

21 A. Yes, sir.

22 Q. Under the -- the same number, M68503-009, we
23 have a TEM photograph. That's going to be on page 50
24 of this exhibit. And explain what this represents.

25 A. This is a tremolite -- it's either a fiber or a

1 bundle. I would have to be sitting at the microscope
2 so I could adjust the focal plane and go in higher
3 magnification to tell you if it was either a fiber or a
4 bundle.

5 But it -- either way, it's still a regulated
6 asbestos structure, meeting the counting rules. In --
7 in this particular case, it's tremolite.

8 Q. And do you include with this in your report --
9 it's part of exhibit -- the exhibit here, the chemistry
10 and the selected area electron diffraction?

11 A. Yes.

12 Q. And throughout these binders, you do that with
13 regards to the photographs, provide for the TEM, the
14 selected area electron diffraction and EDS?

15 A. Yes.

16 Q. If we go to Tab 4, I want to ask you about
17 page 59 and 60. And page 59 has the pretty purple with
18 the blue. There is an arrow right here, and it says
19 "actinolite/tremolite elongation."

20 A. Yes.

21 Q. Is this another example of asbestos fibers
22 documented by the PLM method?

23 A. Yes. And if you go to page 57, it's that same
24 asbestos bundle. And you can see the striations a
25 little bit easier on page 57.

1 Q. 57?

2 A. You just had it in your hand.

3 Q. This one right here?

4 A. Yes. I don't know if you can see it -- my
5 glasses are -- need a new prescription -- but if you
6 look at that closely on the ends you can actually see
7 individual fibers on each end of that bundle.

8 Q. Oh, I see. It's a different magnification,
9 then; right?

10 A. That's at a hundred times. There you go.

11 Now, see on the very -- on each end, you can
12 see what looks like little fibers protruding out of
13 that, that's a classic bundle.

14 Q. I got it upside down.

15 A. Now that you have turned it right side up, it's
16 still a bundle.

17 Q. It's still a bundle.

18 A. So that's almost 70 micrometers long, and if
19 you take one of those little fibers in there for the
20 width, because that's how you determine the aspect
21 ratio on the PLM, you easily have something that's
22 200 to 1 or greater for your aspect ratio in that.

23 And interesting, TEM, even though we have
24 positive TEM samples for this same thing, you never see
25 these large bundles. Every microscopist in the country

1 understands that TEM is biased against these very large
2 bundles. And we don't know why. It gets caught up in
3 the sample prep, because everything you see is smaller
4 than that in TEM. Even though TEM is more sensitive.

5 So there is room for both analysis here, the
6 large stuff and the smaller asbestos stuff, using these
7 two different techniques.

8 Q. Did you find asbestos in samples -- in many of
9 the samples from the '70s as well?

10 A. Yes, sir.

11 Q. And what about the '80s?

12 A. Yes, sir.

13 Q. And what about the '90s?

14 A. Yes.

15 Q. And let's go up to the binder that's listed as
16 the '80s. Exhibit 1082.

17 And, once again, the photographs with the
18 numbers are on there; correct?

19 A. That is correct.

20 Q. So, for example, this one right here, we look
21 and zoom in, it says "1985" on it, I think, on the
22 bottle -- the actual bottle itself. J&J BPC1985;
23 right?

24 A. That is correct.

25 Q. If you could, just in the '80s, give us a

1 representative sample -- well, let me -- let me pick
2 one out because I don't know what I'm looking at here.

3 Let's look at Tab 2, page 14. It's upside down
4 again. Oh, now it's upside down. I don't know how to
5 use this thing.

6 Anyway, Dr. Longo, what's represented here?

7 A. This is another tremolite/actinolite bundle,
8 and this is again under elongation, so it's measuring
9 the speed of the light through the -- essentially the
10 crystalline fiber.

11 This is at a magnification of 200 times, and
12 it's showing you some of the striations of the
13 individual fibers that you can see if you go back to
14 page 13, which would be the other side of what you
15 have.

16 And this is under dispersion staining. And it
17 shows you under a hundred X that -- and, again,
18 dispersion staining one goes around the bundle, so you
19 see more what's happening on the edges. It again shows
20 individual fibers.

21 And this is a bundle that's 64 micrometers --
22 63.4 micrometers in length. So these are all large
23 bundles that we're finding by the Blount PLM method.

24 Q. And if we flip over to page 16, I see that this
25 is marked anthophyllite on part of the structure -- or

1 part of the bundle and talc on another part of the
2 bundle. Explain that.

3 A. Well, it's either a transitional but more
4 likely what we're looking at here is the anthophyllite
5 bundling on a particle of talc, because the
6 anthophyllite is all the way from one end to the other.
7 When you have these transitional anthophyllite talc
8 fibers, you'll see that it's almost growing, looks like
9 one is growing inside the other. But here we have it
10 on the edge, and what we have next to it looks like a
11 talc -- under a talc plate. So we see this sometimes
12 where you have an asbestos fiber sitting on or under a
13 talc plate.

14 Q. And then, if we go over to 17, page 17, we have
15 talc and anthophyllite right next to each other.
16 Bundles of both; correct?

17 A. It's either bundles or a small plate. And
18 here's one of the ways you can tell the difference
19 between asbestos and talc. The very thick portion of
20 the talc plate, the colors aren't similar, and then
21 between where we have the talc in the anthophyllite
22 bundle, it's almost a darkish bluish color, and that
23 tells you that is not anthophyllite.

24 So we -- and then we have that one bundle
25 anthophyllite. And, again, I believe it's laying on

1 top of the talc particle.

2 Q. Then we go to page 19. We have anthophyllite
3 bundle crossed polar. What's that mean?

4 A. The optical -- the polarized light microscope
5 has two polarizing lens, one on the bottom and one on
6 the top. And polarized light is like polarized
7 sunglasses. It causes -- the light is scattering
8 everywhere and it grabs the light and that only is
9 going in one direction. That's why you don't get the
10 glare and stuff when you used polarized light
11 microscopes. You can -- if you fish, you can see the
12 fish better.

13 Now, if you got two of them, you can change the
14 direction pretty drastically and get another direction
15 in there. So in crossed polars, we have the polars
16 turned crossways to each other. And so now we're
17 seeing just the anthophyllite portion where the arrow
18 is. Everything else you see there that we are looking
19 at that talc plate is talc. And you can see that is
20 definitely a different color. And you can also see
21 some of the individual striations there.

22 Q. And do you include in the photographs, the TEM
23 photographs from the same sample? For example, Tab 2,
24 does it have both TEM photographs as well as
25 PLM photographs?

1 A. Yes, sir.

2 Q. In the interests of time, I'm not going to go
3 through every decade or every -- but are there
4 confirmed photographic evidence of asbestos in the
5 '60s, '70s, '80s, '90s, and 2000s?

6 A. Yes, sir.

7 Q. Any question in your mind regarding that?

8 A. No, none whatsoever.

9 Q. Have you confirmed, in your opinion, what has
10 been documented in the documentary evidence of what we
11 went over earlier about Johnson & Johnson Baby Powder?

12 MR. CALFO: Objection, no foundation. Calls
13 for speculation on the part of this witness.

14 THE COURT: That's overruled.

15 THE WITNESS: I'm sorry. Could you repeat it.

16 BY MR. SATTERLEY:

17 Q. Yeah. Have you, in your opinion, confirmed and
18 taken photographs of the presence of asbestos in
19 Johnson & Johnson Baby Powder that were -- was
20 documented in the documents we went over this morning?

21 A. Yes.

22 Q. Back in -- historical?

23 A. Yes. We -- finding the same thing.

24 Q. With regards to -- we don't have your reports
25 in here, just the photographs, but do you have the

1 reports, your reports, with you?

2 A. Yes, sir, I do.

3 Q. And, with regards to the Johnson & Johnson Baby
4 Powder, the -- what percentage of positives did you
5 find, meaning what percentage had asbestos in them?

6 A. For the 72 samples, what I call historical,
7 57 containers and 15 railroad car samples, we had an
8 overall total positive of approximately 68 percent of
9 the 72 we analyzed.

10 Q. So does that mean, Dr. Longo, that if 68
11 percent was positive, that means 30 -- was 32 percent
12 there's no asbestos there, in any of those bottles?

13 A. No. Doesn't mean that.

14 Q. Well, why not? Why not?

15 A. It means --

16 MR. CALFO: Objection, Your Honor. This calls
17 for speculation. There's no asbestos.

18 THE COURT: That's overruled.

19 THE WITNESS: Well, it's just below your
20 detection limit. So at some point all's you can say
21 is, it's below our detection limit, we can't verify if
22 it's there, and we can't verify. And nobody can ever
23 say, it's pure and it's not there, because you can't
24 get to that low of detection limit. All's you can say
25 is nondetect. We can't verify it's there or not there.

1 BY MR. SATTERLEY:

2 Q. How many fibers would have to be there in order
3 for you to even detect it in the method that you're
4 using?

5 A. Right now we have our detection limit that we
6 used here, and I'm just going to scan through the
7 report real quick. We've gotten our detection limit
8 down for these analysis to 3,000 asbestos fibers or
9 bundles per gram of talc. So we have to have at least
10 that many there, in one sample. Then most of them are
11 5 and 6,000 fibers or bundles of asbestos per gram.

12 So think of it as this: If my detection limit
13 is 6,000, that means I have to find -- for me to find
14 one fiber, it has to be at least 6,000 fibers and
15 bundles per gram of cosmetic talc to find one. Because
16 it's spread out through there.

17 Q. And have you -- have you done the calculation
18 with regard to the 7024 with regards to how many
19 asbestos fibers would need to be there per gram under
20 their method?

21 A. Approximately 14 million for one fiber to be
22 there using --

23 Q. For one fiber?

24 A. To be using that method.

25 Q. But wait a second. Their -- their method says

1 they have as many as 20 or 5 fibers of any -- of each
2 variety; right?

3 A. Correct.

4 Q. So you're saying 14 million for one fiber, so
5 how many asbestos fibers could be present under the
6 7024 method and still qualify as nonquantifiable?

7 A. It works out to be about 6' -- well, you take
8 four fibers, it's around 58 million before you -- you'd
9 have to have one more fiber to get that fifth fiber
10 before you would say, yes, it has asbestos in it.

11 If you only had four tremolites, that would
12 work out to a little bit over 50 million asbestos
13 fibers or bundle per gram to find one, because the
14 detection limit is so bad in that protocol.

15 Q. And if you had -- had to find four or five of
16 the same of each variety, so you could have -- you
17 could have four tremolite, four anthophyllite, four
18 actinolite, and four chrysotile and still call it
19 nonquantifiable, what number are we talking about
20 asbestos fibers present and still be able to say it's
21 nonquantifiable?

22 A. A little bit over 200 million fibers and
23 bundles per gram.

24 Q. I apologize.

25 All right. Now let me switch gears and talk

1 with you about Colgate, Colgate testing. And Cashmere
2 Bouquet. Last year, at the request of other attorneys,
3 did you analyze 3 -- or did you analyze 38 samples of
4 Cashmere Bouquet?

5 A. Yes.

6 Q. And did you take photographs and document what
7 your laboratory found in tab, what's called Appendix A,
8 Appendix B, and Appendix C?

9 A. Correct.

10 Q. And we marked as Appendix A -- it's into
11 evidence, I should say, as 1091, photographs from
12 Appendix A.

13 And what does that represent?

14 A. Appendix A is the samples that we received from
15 the law firm of Simon Greenstone.

16 Q. And did you document a photograph of the
17 containers, photograph of the analysis? Did you
18 photograph what was identified?

19 A. Yes, sir. But to be fair, to be included in
20 that, we videotaped the opening up of the seal,
21 Cashmere Bouquet face powder samples that we got.

22 Q. These were sealed?

23 A. Not all of them. But 20 out of these 25 were
24 sealed with the manufacturer's sort of a paper-type
25 covering over than the entire area. Underneath it

1 would be the talcum powder. Sort of a -- they're round
2 and they were all still sealed.

3 Q. Now, I want to -- I'm not going to go through
4 all the photographs in Appendix A, but I want to go
5 through a few of them just so that we can understand
6 what they represent. And I'm just going to randomly
7 pick. If you go to sample, under Tab 12, which is
8 M68072. If you go to -- it's page 220.

9 A. Okay.

10 Q. What are we seeing here in the Cashmere
11 Bouquet, one of the samples?

12 A. I'm sorry. What page are you on?

13 Q. 220. It's got a number, M68072.

14 A. That is a -- it looks like -- if I were to pick
15 that -- let me see if I can find it. All right. Hold
16 on. That would be a tremolite/actinolite bundle for
17 001003. Oh, I'm sorry. We're on -- I'm on the wrong
18 one. You said 220; right?

19 Q. Yeah. 220.

20 A. That would be Number 4 out of that sample.
21 That is a crushed tremolite/actinolite bundle. When I
22 say "crushed," looking at it, it looks like, because
23 this material is milled, meaning it's all ground up to
24 make a certain size, it looks like that was pushed down
25 and caused that bundle to spread apart instead of

1 saying that's three bundles.

2 So that's a tremolite/actinolite. Very large
3 bundle.

4 Q. And if we flip over to this, what does this
5 represent? This is page 219. Immediately pre --

6 A. This is under crossed polars, and this one is a
7 really good example on how you can see some of the
8 individual fibers that are consistent with what a
9 bundle should be. And they're all going in the same
10 direction, and you can see these individual fibers that
11 make up this bundle. At these magnifications this
12 bundle is approximately about 200 to 250 micrometers in
13 length.

14 So think of it as on a TEM grid. I don't know
15 if Lee Poye showed what TEM grids look like, but this
16 would cover two TEM grids -- openings.

17 Q. And let's see. And just so if we can get a --
18 if you can flip to Tab 3. You document a photograph,
19 the container, this is the Cashmere Bouquet face powder
20 in the way it came to you?

21 A. Yes. This was another sealed container, which
22 we videoed when we opened them to have it documented
23 that it was sealed.

24 Q. If you flip over to page 71 of this same
25 sample, it says "elongation," and it's got that pink,

1 and it's got a blue -- once again, what does that
2 represent?

3 A. That's most likely a talc fiber. It's not
4 asbestos. No asbestos was found for the PLM in this
5 particular sample. Only the TEM.

6 Q. So, in this particular sample, we go over to
7 the TEM, was tremolite asbestos found in this Cashmere
8 Bouquet product?

9 A. Yes.

10 Q. Is that a photograph -- this is page 76 there,
11 sir.

12 A. Yes. That's a photograph of an asbestos
13 tremolite structure.

14 Q. And do you include in this the chemistry and
15 SAED?

16 A. Yeah. If you go to the very next page,
17 page 77, you can see the chemistry -- the magnesium,
18 the silicon, and the calcium peak -- which, if you
19 remember, looks identical to the NIST standard,
20 National Institutes of Science and Technology. What
21 they say is tremolite asbestos. So it's a perfect
22 match.

23 Q. Well, let me -- why isn't that a cleavage
24 fragment, Dr. Longo? Why isn't that just a cleavage
25 fragment and not asbestos?

1 A. Well, by all the counting rules in TEM, this is
2 regulated asbestos. It has the appropriate chemistry,
3 appropriate diffraction pattern for the d-spacings. It
4 has the appropriate morphology greater than -- greater
5 than or equal to 5 micrometers in length. This is
6 3.8 micrometers in length. Has to have an aspect ratio
7 of at least 5 to 1 or greater. It matches that. And
8 in this particular case, again, it's on -- just looking
9 at the results here, that would be -- and, again, I
10 would have to be sitting at the microscope to change
11 the focus, but it looks very close to being a bundle
12 just on this two-dimensional plane because of the back
13 end of it has those little bumps. Let's see what the
14 microscopist said.

15 Q. Are you talking about down here, the box down
16 here?

17 A. The microscopist called it a fiber. And that
18 would be the best position because you can change the
19 focal plane.

20 Q. Is it difficult sometimes where there's a
21 photograph like this on calling something a fiber
22 versus a bundle when it's a close call?

23 A. Yes and no. It's difficult if you're just
24 looking at a two-dimensional photograph sitting here,
25 because you're not sitting at the microscope. If

1 you're at the microscope and that is your -- and you
2 even said you got to distinguish fibers and bundles,
3 it's a lot easier because you can change the focal
4 plane, you can change the contrast, and the microscope
5 has a little gizmo you can flip in and increase the
6 magnification by ten times. So --

7 Q. "Gizmo," is that a technical term?

8 A. It is. If you ever worked in a lab, you'd call
9 it a "gizmo."

10 Q. So --

11 A. It's actually binoculars that you can put in
12 and open up a -- open up a small screen so you can
13 focus in on it.

14 Q. In the Cashmere Bouquet, of the 38 samples --
15 and this is just A. We've got B, Appendix B. Is that
16 another -- this 1092, and that is photographic evidence
17 of the samples and the results and the asbestos that
18 was identified; correct?

19 A. Yes, sir.

20 Q. And was this sent to you by -- these five
21 samples sent to you by a different law firm?

22 A. Levy Konigsberg in New York.

23 Q. And then Appendix C, was this -- this is
24 Exhibit 1093 -- these eight additional Cashmere Bouquet
25 products that you analyzed, your laboratory analyzed,

1 took photographs of for the presence of asbestos?

2 A. That is correct.

3 Q. And is there a total of 38 that's a part of
4 this report from last fall?

5 A. Yes, sir.

6 Q. And of the 38 samples -- this is going to be
7 Appendix C of the 38 samples -- how many did you find
8 asbestos in?

9 A. 30 of 38.

10 Q. On Appendix C, 1093, the last one, Tab 8, does
11 that include Cashmere Bouquet, it came in this
12 container?

13 A. Yes, sir.

14 Q. And this is page 337 of the photographs here.
15 Is that tremolite asbestos, sir?

16 A. 337?

17 Q. Yes, sir.

18 A. I'm sorry. What appendix?

19 Q. Appendix C.

20 A. Oh.

21 Q. September of 2018. Page --

22 A. Yes, that's tremolite there. All the way to
23 the back.

24 Q. The very last sample.

25 A. Yes. That would be a tremolite structure that

1 is laying on top of the -- one of the TEM grids. You
2 can see on the left-hand side how you have the little
3 right angle area, dark?

4 Q. Right here?

5 A. Yes.

6 Q. This is -- this is the grid -- the edge of the
7 grid here?

8 A. Correct. So that structure is laying on --
9 over the grid.

10 Q. Is -- so this is described as 4.2 microns in
11 length and 0.4 microns in diameter.

12 Is the fact that it's -- the grid -- it's going
13 underneath the grid, I guess?

14 A. Over the grid.

15 Q. Over the grid?

16 A. Yes.

17 Q. Does that mean that it could be much longer
18 than that, you just can't tell?

19 A. That's correct. You could only -- the rules
20 only allow you to measure the length from where the
21 grid ends and the fiber or bundle starts.

22 Q. And does the chemistry and the diffraction
23 pattern match up with regards to the rules, all the
24 methods, in calling this asbestos?

25 A. Yes, it does.

1 Q. Now, if somebody were to come into this
2 courtroom and sa, no, no, no, Dr. Longo has got it
3 wrong, that's a cleavage fragment, under the -- under
4 the rules of identifying asbestos set forth by these
5 various methods you've been telling us about, would
6 that be -- would that be accurate?

7 A. No. It has very specific regulated --
8 health-regulated rules, and this is what you have to
9 count. You have to follow the protocol. If you use a
10 certain type of protocol -- and these are in all the
11 protocols for these rules for TEM -- you have to follow
12 them.

13 Q. Now I'm going to switch and go to the
14 20 samples that I requested to your analyst, Zach, go
15 and pick up from RJ Lee, J&J and Colgate's experts.

16 A. Okay.

17 Q. The actual quantity of samples was more than
18 20; correct?

19 A. Yes.

20 Q. At the time of your report in this case, had
21 your laboratory analyzed 20 of those samples?

22 A. Yes.

23 Q. And have we marked the chain of custody for
24 those as 1096?

25 A. I'm looking for them.

1 Q. It's a -- the skinny binder.

2 A. Yes. Thank you.

3 Q. And if we look at the first three, just the
4 photographs -- this is going to be on page 11 -- we see
5 what the container looks like for the first three;
6 right?

7 A. Yes.

8 Q. And they're dated according to what RJ Lee and
9 Colgate has provided to you; correct? The '70, '70,
10 '73 to '77?

11 A. Yes.

12 Q. And if we look at the next three, did you --
13 did you and your laboratory just pick the first 20?

14 A. Yes.

15 Q. And was there problems with a couple of those
16 so you had to extend to 22?

17 A. There was.

18 Q. And tell us what the problem was.

19 A. They were in methanol. They weren't --

20 Q. What's --

21 A. They weren't in a powder. The sample bottles
22 had alcohol in them, methanol, which is a form of
23 alcohol, mixed with it, so we didn't want to analyze
24 those since they weren't starting with just the talcum
25 powder. It's different, you know, the protocol, so we

1 just extended it to 22 and did not analyze the ones in
2 methanol.

3 Q. So the -- into evidence the jury can take a
4 look at the photographs of the various containers of
5 the Cashmere Bouquet that goes along with the chain of
6 custody; correct?

7 A. Correct. Now, we didn't receive the
8 containers; we just received samples from the
9 containers.

10 Q. RJ Lee, the laboratory for Colgate, was the one
11 you guys had to actually go to Pittsburgh, Zach had to
12 go to Pittsburgh, to pick these up?

13 A. Yes, sir.

14 Q. In Appendix B do you have the results of the --
15 PLM results for these Colgate -- these Colgate samples?

16 A. Yes, sir.

17 Q. And I have Appendix B having 15 different --
18 excuse me -- 17 different samples. Was there 16 or 17
19 that was positive by PLM?

20 A. Let me get the report, because I don't want
21 to -- for these 20 samples just to make sure.

22 THE COURT: While he's looking for that,
23 Mr. Satterley, you referred to this as "Appendix B."
24 What -- what is the --

25 MR. SATTERLEY: To his report.

1 THE COURT: What is the exhibit number?

2 MR. SATTERLEY: Oh, I apologize. 1097.

3 THE COURT: All right. So that's -- that's
4 1097?

5 MR. SATTERLEY: Yes, Your Honor. 1097.

6 BY MR. SATTERLEY:

7 Q. And, Dr. Longo, let me see if I can help you
8 out with regards to -- the first -- if we go to Tab 1,
9 the first group of photographs relate to a talc bundle.

10 A. Yeah. The first set of photographs, there was
11 16 positives by PLM --

12 Q. Okay.

13 A. -- and this one was not one of them --

14 Q. Okay.

15 A. -- the very first one.

16 Q. So -- and we'll get to the TEM in a little bit.
17 So 16 of the 20 by PLM had asbestos in them, in
18 your opinion?

19 A. Yes, sir.

20 Q. And did you document that and photograph it and
21 produce it as a report so Colgate could take a look at
22 that?

23 A. Yes, sir, I did.

24 Q. And -- and once -- since I've got this up here,
25 this is page 4 of 1097. How do you know that's a talc

1 fiber bundle?

2 A. Well, that's -- that's in elongation, but if
3 you go to -- if you go to page 2 --

4 Q. Oh, page 2.

5 A. Now, these samples had lots of other stuff in
6 it, but if you look where that is, where the talc fiber
7 is, you'll notice that from the other ones we looked at
8 and were more yellowish-gold than in this particular
9 case, in parallel, parallel dispersion, dispersion
10 staining, alls you get is this new blue color, this
11 nice bluish color.

12 That tells you it is -- it is talc for these
13 types of samples, as well as the other information that
14 we gleaned from the crystalline analysis by polarized
15 light microscopy.

16 Q. Dr. Longo, has J&J counsel in the past accused
17 you of misidentifying things as asbestos?

18 A. Yes, sir.

19 Q. Okay. Well, why didn't you just identify this
20 as asbestos and say, "This is asbestos," instead of
21 talc?

22 A. Because it's not. That wouldn't be right.

23 MR. CALFO: Your Honor, I object. Vague and
24 ambiguous as to "this." Is it a photograph?

25 MR. SATTERLEY: Yeah, the photograph. That's

1 what we're talking about.

2 MR. CALFO: I thought that was Colgate.

3 BY MR. SATTERLEY:

4 Q. Whether it's Colgate or Johnson & Johnson --

5 THE COURT: Well, it's --

6 BY MR. SATTERLEY:

7 Q. -- my question is --

8 THE COURT: It's 18 minutes of 3:00. We are
9 going to take our afternoon recess and come back in 15
10 minutes.

11 Ladies and gentlemen of the jury, it is your
12 duty as jurors not to converse amongst yourselves or
13 with anyone else on any subject connected with the
14 trial or to form or express any opinion thereon until
15 the matter is submitted to you.

16 I'll see you back in 15 minutes.

17 (Whereupon, the following proceedings were held
18 outside the presence of the jury:)

19 THE COURT: All right. It appears that all of
20 the jurors have departed from the courtroom.

21 Is there anything we need to put on the record
22 before we go on break?

23 MR. SATTERLEY: Your Honor, the only thing is
24 that I understand Your Honor made rulings sometime
25 today with regard to certain documents. We would just

1 like to incorporate those documents into evidence
2 regarding -- some J&J documents.

3 And then at some point, we need to address the
4 few remaining objections to the Scala exhibits. And I
5 don't know if Your Honor wants to do it at the end of
6 the day or tomorrow morning or whenever Your Honor --

7 THE COURT: I'm happy to do it at the end of
8 the day. We'll send the jury home at 4:30.

9 MR. SATTERLEY: That's fine, Your Honor.

10 THE COURT: Okay. Anything else?

11 We are in recess.

12 MR. SATTERLEY: Yes, Your Honor.

13 MR. GARY SHARP: Thank you, Your Honor.

14 (Recess taken.)

15 (Whereupon, the jury having entered the
16 courtroom, the following proceedings were held:)

17 THE COURT: Okay. The record reflects that all
18 the jurors are present in their appointed seats,
19 counsel are at counsel table, and we're ready to
20 proceed.

21 Go ahead, Mr. Satterley.

22 MR. SATTERLEY: Thank you, Your Honor.

23 BY MR. SATTERLEY:

24 Q. We were talking about Cashmere Bouquet and
25 specifically about 1097, the PLM results, and I was

1 asking specifically about some of the photographs.

2 If we can go to the very first -- or the second
3 sample, I'm going to ask you about this. We have
4 anthophyllite and then a talc plate here and then talc
5 at the other end?

6 A. Yes, sir.

7 Q. Explain that.

8 A. Well, that's called the intergrowth or
9 transitional. So you have anthophyllite as well as
10 talc. So when it was formed, you get two different
11 minerals, essentially, on one fiber, or bundle here in
12 this case.

13 Q. I saw that in this -- these pictures, to me --
14 and you can correct me if I am wrong -- there appears
15 to be several photographs. Is this a photograph of the
16 same structure that we just looked at?

17 A. Yes, sir. It's under crossed polars, and it's
18 at a magnification -- a higher magnification of 200 --
19 400 times. The other one was 100.

20 And this just shows the -- so this is at 400
21 under crossed polars, and you can see that it has fiber
22 structures that go all the way through. So it's known
23 as an intergrowth. So it's -- it's not only
24 anthophyllite, but it has some fibrous talc associated
25 with it.

1 Q. Is this, the next page, page 11, the same fiber
2 that is being analyzed with -- it's got a different
3 color background. Is that the same?

4 A. Yes, sir. This has no filters. It's not under
5 dispersion staining. It's not an image in that
6 530-nanometer plate. It's just under crossed --
7 crossed polars.

8 So you're seeing the talc plate that it's
9 laying on. And this may be, in fact, actually other
10 asbestos fibers laying on top of it, but it's too small
11 for us to resolve and -- and adequately identify on
12 that plate. It has anthophyllite on one end and talc
13 on the other.

14 Q. And the reason why I asked this question is,
15 we, or maybe the jury, when they look through these
16 photographs when they're evaluating this case -- there
17 would be several photographs that appear to be the same
18 structure but different colors and different
19 backgrounds. That's just different ways in which
20 you're looking at it under the microscope?

21 A. Yes, different wavelengths, a lot of which will
22 give you different colors. Some of them -- and you
23 have to just remember to take a look at what the
24 magnifications are. Same fiber, but it's bigger, it's
25 typically at a higher magnification. So smaller ones

1 are anywhere from 100 to 200, and then you'll also have
2 up to 400.

3 Q. And then this one, for example, this one is on
4 page 12. It looks like it's -- it's going this
5 direction, and this one, it's going this direction. Is
6 that the same situation, it's perpendicular?

7 A. Yes. It's on a stage that you can rotate. So
8 here, we have parallel dispersion, and then here, we
9 have perpendicular dispersion. And since you're
10 changing it, the fiber -- or bundle here, to the
11 direction of the light under dispersion staining, the
12 vibrations that come through change and give you
13 different -- these different colors that then they can
14 then match to the refractive indices, which then will
15 put it in either tremolite, actinolite, anthophyllite,
16 or if there was some other type of asbestos present.

17 Q. The Colgate lawyer wanted me to point that you
18 had gone to another sample, M69934. This is yet
19 another sample with asbestos in it; correct?

20 A. Yes, sir.

21 Q. And I wanted to ask about this. It says,
22 "Elongation at 400 magnification, tremolite."

23 Is this asbestos, Dr. Longo?

24 A. Yes, sir. You're -- we're looking at, again,
25 the exact same structure, higher magnification, under a

1 different type of filter, giving you this color.

2 Q. And do we have, once again, over here, page --
3 two pages over, page 31, exact same structure?

4 A. Oh, you -- you've moved on me.

5 Q. I'm sorry. Page --

6 A. Now we're on -- now we're on Sample 5.

7 Q. Yeah. Sorry.

8 Page 29 and page 30 and page 31, are those all
9 the -- of Exhibit 1097, all the same structure under
10 the microscope?

11 THE COURT: Well, before -- let him answer the
12 question over again as posed. He was still on the last
13 sample.

14 MR. SATTERLEY: I apologize, Your Honor.

15 THE COURT: Because I'm confused. And I
16 don't -- and maybe nobody else is, but I'm confused.

17 So what -- so what is that?

18 THE WITNESS: That's actinolite/tremolite. But
19 let's just start from the beginning of this one so
20 people can look at it and -- and understand what
21 it's -- what's going on.

22 So this is -- and we're starting on page --

23 BY MR. SATTERLEY:

24 Q. 22?

25 A. -- 20 -- 22 now. Now, you've gone to something

1 different.

2 Q. I'm sorry. I was moving too fast.

3 All right. Do you want to go to a different
4 one?

5 A. Let's start from the beginning. So move it up
6 so we can see the -- see the numbers underneath, the
7 actual title of this. Just move the whole thing
8 straight up.

9 Okay. There you go.

10 That identifies what we found in this
11 particular case, going from right to left at the
12 bottom. This was done by the International Standards
13 Organization, polarized light microscopy. No heavy
14 liquid density separation was done. The sample number
15 is M69934-005ISO, and this would be the first structure
16 found under this method.

17 So now we're starting. So this is under
18 dispersion staining, and you can see we have a lot of
19 stuff in here. And then over to the upper right, you
20 see the actinolite/tremolite bundle, and it's
21 32.6 micrometers long.

22 And we're in parallel dispersion. That's
23 the -- usually the first thing up on the particular
24 sample.

25 Now, if you go to the next page, page 23,

1 that's the perpendicular under dispersion staining.
2 You can see the change in color which is consistent for
3 tremolite/actinolite at these wavelengths.

4 Q. And now.

5 A. And now we're getting to the elongation. Now
6 it's at 400 times. So it's been to this, you know,
7 north -- sort of the northeast direction. And that
8 matches the colors it ought to be. And then under
9 crossed polars --

10 Q. Can we go to the next page, 25?

11 A. Well, you go to 25. We're still on this one
12 structure, because we're going through all the
13 different analytical procedures for identifying it.
14 Here we have it under crossed polars. And then the
15 very next one is the last one you would have with
16 crossed polars out. Now you're just looking at it
17 under the light. And you can see the individual
18 striations in there. The polarizers are out. And this
19 is regulated asbestos. It's going to be approximately
20 33 microns long, and those individual fibers in there
21 would give you aspect ratios of over a hundred to one,
22 closer to 200 to 1. So it meets all the regulations
23 that -- for these PLM analysis. For this.

24 Q. Let's keep going through this Tab 4 just so we
25 can talk through -- a complete through one sample so we

1 know what we're looking at.

2 A. So if you go to the very next sample, the very
3 next page where you have that 88.6. Now, pull it up so
4 you can see the bottom. This would be the second
5 structure that we're finding under the ISO method. So
6 you see the 0002? And, again, under parallel
7 dispersion. In this case you have more of the golden
8 yellow. And then the next page would give you the
9 perpendicular dispersion. Not that page.

10 Page Number 28.

11 Q. Go back.

12 A. It's hard to see in this lighting. And then we
13 would go on. Actinolite, tremolite -- the next one
14 would be the elongation, page 29.

15 Q. The pink or purple, is that always going to be
16 the elongation?

17 A. Yes. It's got the right colors at the right
18 direction under the polarizers and under the -- under
19 the 530-nanometer plate.

20 Then the next one is crossed polars.

21 Q. Now, this is page 30 of Exhibit 1097; is that
22 correct?

23 A. Correct.

24 Then the very next one is this same structure
25 again without crossed polars.

1 Q. Is there any question in your mind, Dr. Longo,
2 that this is regulated asbestos in the Cashmere Bouquet
3 product?

4 A. No, sir.

5 Now, just for completion, let's go to the very
6 next page, page 32. Now, here is the exact same sample
7 under the Blount method.

8 THE COURT: That's not the next page.

9 THE WITNESS: It should be. Page 32?

10 MR. SATTERLEY: Yes, Your Honor.

11 THE COURT: Well, it's a different sample on
12 the left.

13 THE WITNESS: Yes, sir, it is, but it's just an
14 example of the -- now the Blount PLM with the same
15 sample.

16 BY MR. SATTERLEY:

17 Q. Because BL, is that the -- right there. Does
18 that mean the Blount method as opposed to an ISO
19 method?

20 A. Correct.

21 THE COURT: Then the 002 and the 001 are
22 different.

23 THE WITNESS: Yes, sir. This is 005.

24 Now, one of the things you'll notice, it
25 seems -- even though it has some big particles in

1 there, there's not as much clutter around. It has
2 removed -- and this is -- a lot of this is not talc,
3 this is other ingredients there are in the -- in the
4 Cashmere Bouquet. You can see, even though you have
5 these big particles, it's not all this small, cluttered
6 stuff around, so it shows you how the talc is removed
7 and cleans the sample up.

8 BY MR. SATTERLEY:

9 Q. And the magnification level is different also.
10 It's a hundred magnification as opposed to what you
11 were talking about earlier was 400?

12 A. No. All the dispersion staining is typically a
13 hundred.

14 Q. Oh, okay.

15 A. 400 would be elongation. And if you go to the
16 very next page, page 34.

17 Q. I see. Let me stop there so I can clear my
18 confusion.

19 So when see something that's a hundred, if the
20 shape looks different, it's because it's a different
21 magnification, like a hundred to 400?

22 A. Correct.

23 Q. Okay. All right. Now we're on page -- am I on
24 the right page here, page 33?

25 A. That's 33. So now we're in perpendicular --

1 parallel. But if you go to the very next page --
2 because this is a good example of a very fibrous
3 bundle.

4 Q. No, wait a second. Let me -- no. This one
5 says perpendicular --

6 A. Perpendicular. If you go to page 34.

7 Q. Okay. I see. I see.

8 A. In this particular one, you can absolutely see
9 the single fibers in the elongation, as well as the
10 next pages, so this is a very good example of a very
11 fibrous bundle.

12 Q. So what we're seeing here on page 34 is a
13 close-up -- closer up view of what we were looking at
14 on page 33, 32, 31; correct?

15 A. That is correct. It's -- we were looking at
16 100. This is now 400.

17 Q. And there we got page 35. Is that yet
18 another -- the crossed polar of the asbestos in the
19 Cashmere Bouquet product?

20 A. Yes, sir. The same structure. It just shows
21 you a little bit more detail of the fibers.

22 And then the -- without the polarizers -- and,
23 again, you can -- you can see the individual fibers.
24 And so on.

25 Q. And it goes -- you have a whole bunch of

1 photographs that just demonstrate -- do you have a
2 whole bunch of photographs that demonstrate the
3 presence of asbestos in the Cashmere Bouquet product?

4 A. Yes, sir.

5 Q. There's one other term that you used. If we
6 flip over to Tab 10 to the elongation, page 159.

7 Is this Tab 10 yet another asbestos bundle in
8 a Cashmere Bouquet product?

9 A. Yes, sir.

10 Q. And page 160 -- actually, 161. "Aperture
11 diagram partially closed." What's that mean?

12 A. Diaphragm.

13 So that the aperture, which lets the light
14 through, is slightly closed to increase the -- increase
15 the contrast so that you can resolve these individual
16 fibers in the bundles better. It's just a -- it's an
17 optical microscopist's technique for changing the
18 contrast. Instead of hitting a darker button, it can
19 change the light and get you a better contrast.

20 Q. Based upon the PLM results, Dr. Longo, are you
21 of the opinion that there's asbestos in Cashmere
22 Bouquet talcum powder?

23 MR. MULARCZYK: Objection. Vague.

24 THE WITNESS: Yes, sir.

25 THE COURT: I'm going to overrule that. You

1 can inquire on cross-examination.

2 THE WITNESS: Yes, sir, for the samples that we
3 tested.

4 BY MR. SATTERLEY:

5 Q. Well, the four of them by PLM you didn't find
6 asbestos.

7 A. By PLM we did not.

8 Q. What about by TEM?

9 A. Yes, sir. The other four were positive because
10 we're looking at two different types of structures, and
11 so we only analyze those four by TEM. Since the Blount
12 PLM and the ISO PLM were positive, the negative ones we
13 checked to see if the TEM, which is more sensitive,
14 could determine if it was present or not.

15 Q. And Exhibit 1098, the folder, does that
16 represent photographs of some of the TEM results from
17 the Cashmere Bouquet product?

18 A. Yes, sir.

19 Q. And if we go to -- and did you find asbestos in
20 all four of the negatives by PLM?

21 A. Yes, sir, we did.

22 Q. And the second -- that Tab 2, page 9 of
23 Exhibit 1098, what does this represent?

24 A. This is a tremolite bundle, and these are one
25 of these even with the photograph you don't have any

1 doubt telling that's a bundle. You can see one, two,
2 three, four, five, six -- I can see six individual
3 fibers there. Some of those were -- where you've
4 circled actually have two -- two or three pushed
5 together, and, actually, you have one that almost has a
6 splayed end, which you normally do not see on TEM
7 because of the size.

8 Q. And splayed ends, is that a classic
9 identification of a bundle?

10 A. No. It's more of a classic identification of
11 commercial asbestos that's been added to bulk samples.
12 Very rarely do you see splayed bundles in TEM at all
13 because of the size you're looking at. It's the bulk
14 samples.

15 Q. I apologize. I should have asked the question
16 this way: The fact that this is -- these have splayed
17 ends and they're a bundle, does that indicate to you
18 that this is asbestos?

19 A. No. It tells us it's asbestos by meets all the
20 counting definitions, has the right chemistry, has the
21 right diffraction pattern. This is regulated tremolite
22 asbestos. But if you just -- as being interested in
23 this, this is what you would normally see in a product
24 where the asbestos has been added at very high
25 concentrations. It's very rare to see a splayed bundle

1 of tremolite in these talcum powders because tremolite
2 is brittle. So when they mill it, it grinds up. So
3 it's just interesting to see.

4 Q. And in this, you have -- you have -- do you
5 have the chemistry -- the calcium, magnesium, the
6 silica?

7 A. Correct. You have the -- again, it's almost a
8 fingerprint. It's a ratio of magnesium to silica to
9 calcium, all based on the height of the calcium peak.

10 Q. And do you have the diffraction pattern, the
11 SAED, that meets all the requirements that this is
12 asbestos?

13 A. Yes, sir.

14 Q. Now, back on this photograph, I just want to
15 ask, this part right here, is part of the film on the
16 grid torn there?

17 A. It's torn and gone. That's -- that's a carbon
18 film that is put on to the sample, the filter before we
19 dissolve the filter away.

20 That carbon film is actually only about 10 to
21 20 nanometers thick, about 15 to 20 atoms thick, so
22 it's very fragile. And the way it's done is, the
23 sample is collected on a filter. That filter is then
24 coated with carbon, and then a small piece of that
25 filter is put on the TEM grid and then put on filter

1 paper that's soaked with chloroform, and it slowly
2 dissolves away the filter and just leaves a replica of
3 the filter.

4 See all those little holes? Those are all the
5 pores that are in the filter that made a replica of
6 what you're seeing.

7 Q. And the fact that the film is partially gone
8 there, does that in any way detract from the fact that
9 this is a regulated asbestos bundle of tremolite?

10 A. Oh, no. It's -- it's not uncommon to see torn
11 films from just putting it in and out of the microscope
12 because you're going under pressure changes, because
13 it's so fragile.

14 Q. The same tab, Tab 2, what is depicted here, the
15 photograph on page 12?

16 A. Page 12 is another tremolite asbestos. I
17 believe if I was -- I think you can call this a bundle,
18 and it's either laying on top or underneath a talc
19 plate. That thing in the middle.

20 Q. This thing right here?

21 A. Yes, sir.

22 Q. And the chemistry, does the chemistry match up
23 to be a regulated tremolite?

24 A. Yes, sir, it does.

25 Q. And once again, the selected area electron

1 diffraction, does it match up?

2 A. It does.

3 Q. We have another one here on this sample. And
4 what does this represent?

5 A. This represents talc, fibrous talc.

6 Q. And is it labeled as talc there?

7 A. That's correct. This is not asbestos. This is
8 fibrous talc in the sample.

9 Q. And does it have the chemistry of talc?

10 A. Yes.

11 Q. And does it have the diffraction pattern of
12 talc?

13 A. Yes.

14 Q. So I'm not going to go through all these
15 photographs of all the asbestos in the TEM, but is
16 there any question in your mind, Dr. Longo, that
17 there's asbestos documented by TEM in the Cashmere
18 Bouquet samples that you received from the RJ Lee
19 Group?

20 A. No, there's no doubt.

21 Q. And has it been documented and photographed and
22 produced to the defendants, the lawyers for Colgate?

23 A. Yes, sir.

24 Q. Now, if somebody were to say to this jury that
25 you've never written a letter about or written a report

1 regarding the presence of asbestos in J&J products,
2 would that be true?

3 A. I've written reports. I'm not sure who I'm
4 supposed to send the letter to.

5 Q. Have you issued those reports and produced them
6 and produced them to J&J and been examined by J&J's
7 lawyers on many occasions?

8 A. Yes, sir.

9 Q. Now I want to switch gears and talk about
10 Patricia Schmitz.

11 Do you have your written, signed report that
12 you issued back in March of this year?

13 A. Yes, sir, I do.

14 Q. Does it outline many of the items that you
15 reviewed, including her deposition?

16 A. Her six volumes of deposition, yes.

17 Q. And did you review the testimony of her
18 sisters?

19 A. Yeah. Joni and Susan. I also reviewed that.
20 So eight depositions. Or actually nine.

21 Q. By the way, I should have asked this question
22 earlier: What does it mean if you find one fiber
23 bundle by TEM? How many fibers is that per gram?

24 A. Depending on the detection limit, either one
25 fiber or one bundle can run anywhere from 6,000 to

1 9,000 individual fibers in bundles per gram.

2 Q. And how does that equate in terms of how many
3 fibers per bottle?

4 A. Well, if you have a 9-ounce bottle, every ounce
5 is 28.4 grams, I believe, and if you have nine of
6 those, multiple that 28.4 by 9 by 9,000 fibers.

7 Q. Tell the folks on the jury what you did with
8 regards to your evaluation of Mrs. Schmitz' exposure to
9 asbestos from her talcum powder usage and being near
10 her family members when the product was being used?

11 A. I read all her depositions, as well as her
12 sisters' depositions, and then went through and said,
13 okay, well, she stated that, you know, when her sisters
14 were young and with her mother for three months, that
15 she would be there once a day for both sisters when the
16 sisters got bathed, and the mother would use Johnson
17 Baby Powder. And she said she was standing right
18 there. So that would be -- every day for those three
19 months would be two exposures, or two applications.

20 You know, and then -- and I'm going on to be --
21 you know, two times two and a half weeks after that for
22 1.7 years with the sisters, then diapering the sisters,
23 which she helped her mother. So I added up all those
24 applications.

25 And I tried to be conservative because she

1 would say things like diapering, you know, three to
2 four times per week. I would put 2.5 times per week
3 just for the times being missed, and that sort of
4 thing.

5 So when her mother applied the Johnson Baby
6 Powder to herself, she would be standing there. So I
7 added that up.

8 And so at the end of the day, I could get 2,199
9 Johnson Baby Powder applications.

10 Q. Those 2,199, was that relating solely to 1957
11 to 1967?

12 A. Yes, sir.

13 Q. Did you likewise evaluate the total number of
14 Johnson's Baby Powder applications relating to Vermont
15 talc source from '68 to 2003?

16 A. And that's a good point. I broke it down into
17 the different mines. So the '57 to '67, Johnson &
18 Johnson was using their -- their Italy source for talc.
19 And then I broke it down from 1968 to 2003, which was
20 the Vermont talc source that Johnson & Johnson was
21 using.

22 And for the -- for 1968 to 2003, when Patricia
23 was 10 years old in '68 until she was 13 in 1971,
24 testified that she used Johnson Baby Powder three to
25 four times a week for her personal bathing. So three

1 to four times a week, using three and a half times a
2 week times the three years that she did that, '68
3 to '71, was 825 applications.

4 Then she testified that she was present and
5 assisted when her mother was incapacitated because of a
6 bad shoulder, that she would bathe her two to four
7 times a week from 1998 to 2' -- approximately four
8 times a week from 1998 to 2005. So I said three times
9 a week times 52 weeks times five years.

10 Q. And you have a total of 1,605 applications?

11 A. Correct.

12 Q. Let me stop you right there. I would like for
13 you to assume -- well, nowhere in her deposition or her
14 sisters' deposition was there any discussion or
15 questions about her father having Alzheimer's; correct?

16 A. That is correct.

17 Q. About caring for him in the hospital bed in
18 their house in their dining room; correct?

19 A. No, sir. That never came out in the testimony.

20 Q. So if there was -- I'd like for you to assume
21 that there's additional testimony that Patricia Schmitz
22 helped take care of her father for roughly ten years,
23 the last ten years of his life, and utilized Johnson's
24 Baby Powder during those ten years, you haven't taken
25 that -- you haven't added that into this calculation;

1 correct?

2 A. No, not at all. That was -- that information
3 was never brought out in any of the depositions.

4 Q. So that would be on top of the calculations
5 that you've already made here in this report; correct?

6 A. Yes.

7 Q. And there would be additional exposure that
8 would be additive of the exposure assessment you have
9 in Mrs. Schmitz' case?

10 A. That is correct.

11 Q. With regard to the Chinese-sourced talc, how
12 many applications in -- to Chinese-sourced talc?

13 A. 312. From -- again from 2004 to 2005, three
14 times a week, when her mother needed help again.

15 Q. And then Cashmere Bouquet, did you do a similar
16 type of calculation with regards to her testimony
17 regarding her use of Cashmere Bouquet?

18 A. Yes, sir, I did.

19 Q. And what -- how many total applications of
20 Cashmere Bouquet did she have according to her
21 testimony?

22 A. According to her testimony, she used it from
23 1970 to 2005. And that she probably -- and she stated
24 that she used almost every day after bathing, she
25 stated she probably did not use Cashmere Bouquet

1 20 percent of those days. So not every day during that
2 time.

3 So daily minus 20 percent is 392 (sic) days of
4 use instead of 365, times 35 years.

5 Q. And what's the total application of Cashmere
6 Bouquet?

7 A. That works out to 10,220 applications.

8 Q. Did you also consider Avon and her -- the fact
9 that she used Avon product?

10 A. Yes, sir, I did.

11 Q. And what's the total application from 1980 to
12 2005 regarding her use of Avon?

13 A. 3,250 applications of Avon talcum powder.

14 Q. So what opinions have you developed based
15 upon -- and -- and what calculations have you developed
16 based upon her exposure, the description she has of
17 exposure, your knowledge of -- of this product with
18 regards to, first, Johnson & Johnson?

19 A. Well, the first opinion in -- for each of
20 these, that she would have had significant exposure to
21 cosmetic talcum powder from these three different
22 manufacturers: Johnson & Johnson, Colgate-Palmolive --
23 Cashmere Bouquet -- and Avon.

24 The second opinion is -- based on our testing,
25 based on historical documents, based on the percentages

1 that we find positive, it's my opinion that more likely
2 than not, when she used any of these products --

3 MR. CALFO: Your Honor, I object to this. He's
4 not an expert in statistics.

5 THE COURT: It's overruled.

6 You can answer that question.

7 THE WITNESS: Thank you, Your Honor.

8 -- that she would have had a significant
9 exposure to airborne asbestos -- and it's
10 interesting -- significantly over background, even
11 though there is no background of tremolite/
12 anthophyllite in the natural environment, unless there
13 is a source.

14 So you can use the IARC number of 1.0 times
15 10 to the minus 5 fibers per cc --

16 BY MR. SATTERLEY:

17 Q. You went too fast for me. 10 to the minus --
18 10 to the minus 5 --

19 A. 0 -- 0.0000.

20 Q. How many --

21 A. Five zeros. A .1 followed by four -- excuse
22 me. Four zeros and a .1. I did that backwards.

23 Q. Four zeros and a -- a 1?

24 A. And a 1.

25 Q. And that's the IARC background number?

1 A. Yes.

2 Q. Okay. And using that IARC back- -- background
3 number, based upon everything you know of Patricia
4 Schmitz, based upon everything you know of the
5 historical testing, based upon everything you know of
6 the scientific literature, did she have significant
7 exposures above background to asbestos from Johnson's
8 Baby Powder?

9 A. Yes.

10 Q. Did she have significant exposure above
11 background to Cashmere -- to asbestos from Cashmere
12 Bouquet --

13 A. Yes.

14 Q. -- talc?

15 MR. MULARCZYK: Objection. Foundation.

16 THE COURT: It's overruled.

17 BY MR. SATTERLEY:

18 Q. Go ahead.

19 A. Yes.

20 Q. And -- and -- and is it -- in terms of exposure
21 to asbestos, is it important to you that these products
22 were intended to be shaken out into the air?

23 A. Yes.

24 Q. And why is that important?

25 A. Because these products are designed to be --

1 not intentionally, but the way they're designed and
2 milled and ground and used, these particles become very
3 airborne very easily. You're not starting with an
4 asbestos product that you have to grind, sand, or do
5 something to get exposure.

6 This is just merely shaking a very fine powder
7 out that gets airborne very easily and stays airborne
8 very easily because of the sizes of those microscopic
9 particles. Excuse me.

10 So the way it's designed, you're shaking out a
11 very fine powder that causes exposure because it gets
12 airborne very easily. And with those accessory
13 minerals, such as tremolite or anthophyllite asbestos,
14 in there, that's what causes the exposure.

15 Q. And is that -- would it be fair to say this
16 product is not -- the asbestos in this product is not
17 encapsulated?

18 A. No, there is no encapsulation involved here.
19 It's just a mixture of cosmetic- or pharmaceutical-
20 grade talcum powder with trace amounts of --
21 potentially trace amounts of amphibole asbestos that we
22 can detect using these protocols we're using.

23 Q. Now, one other concept I want to talk with you
24 about in terms of exposure is a concept called
25 re-entrainment. What is re-entrainment?

1 A. It's an industrial hygiene word, and it's
2 really just a fancy word for getting the dust off the
3 surface and getting it back up into the air.

4 You know, it's like taking a rug out and
5 beating on it. And that dust that's gotten into that
6 throw rug over time will start coming out, and you can
7 see it, or sweeping up dust, where, if it's the right
8 lighting, you can see the dust that's moving as well as
9 what's getting up in the air.

10 So you're disturbing what's happened before,
11 that's now on a surface, and you're disturbing it again
12 by either sweeping or wiping or sometimes even walking
13 through it, because your foot going down causes
14 pressure for it to come up.

15 So it is redistributing asbestos dust that has
16 been put onto a surface after use.

17 Q. And do you have an opinion, Dr. Longo,
18 whether -- I would like for you to assume the testimony
19 will be that occasionally her sisters and herself would
20 clean up the baby powder or the Cashmere Bouquet after
21 they -- they applied it to their body or to their
22 family members.

23 And the cleaning up process, does that result
24 in additional exposures?

25 MR. MULARCZYK: Objection. Foundation.

1 THE COURT: Overruled.

2 THE WITNESS: Yes. In my opinion, it does.

3 BY MR. SATTERLEY:

4 Q. And by the way, Dr. Longo, you weren't in --
5 in -- at their house on Bay -- Bay Street over in
6 Alameda at any point in time; correct?

7 A. I was not.

8 Q. And -- and nobody -- you have not seen anybody
9 measure the level of dust that they were exposed to
10 from any -- any powder product; correct?

11 A. That is correct.

12 Q. You've not seen any instruction or direction
13 from any company saying, "Hey, you better measure the
14 amount of dust you're breathing in" at any point in
15 time, have you?

16 A. I have not.

17 Q. Now, in addition to your analysis, have you
18 relied upon published papers, where published papers
19 talk about --

20 Are you familiar with the Gordon paper in 2014?

21 A. I am.

22 Q. And have you relied upon the Gordon paper?

23 A. I have.

24 Q. And does the Gordon paper have information
25 regarding exposure and exposure that occurs with

1 regards to Cashmere Bouquet product?

2 A. That paper was all -- was all about exposure
3 from using Cashmere Bouquet products.

4 Q. And it was -- was that paper specifically
5 studying exposures to cosmetic talc products in terms
6 of what an individual may have?

7 A. Yes.

8 Q. And have you also read the Anderson paper,
9 Elizabeth Anderson, with a company called Exponent?

10 A. I have.

11 Q. And have you looked at the underlying data from
12 that paper with regards to the Cashmere Bouquet product
13 and whether or not it has asbestos in it?

14 A. I have.

15 Q. And based upon your analysis of that published
16 paper, the Anderson paper, and the underlying data,
17 does the underlying data support the fact that there's
18 asbestos in the Cashmere Bouquet product?

19 A. Not the way the paper is written, no.

20 Q. Well, what do you mean?

21 A. Well, it says that it's all cleavage frag;
22 there is no asbestos there.

23 Q. Okay. And the paper itself says it's all
24 cleavage fragments?

25 A. That's what I recall, yes, that -- in my

1 opinion, it's redefined what asbestos is.

2 Q. And have you had, in part of your reliance
3 materials, the underlying data from the lab in Hayward
4 to the Anderson paper?

5 A. Yes, sir.

6 Q. And does the underlying data demonstrate
7 anthophyllite asbestos being present in the Cashmere
8 Bouquet product?

9 A. Yes, sir, it does.

10 Q. And in your reliance materials, do you also
11 rely upon, with regard to Cashmere Bouquet, J&J
12 documentation from a -- from a Mr. Rolle in 1976
13 regarding finding of anthophyllite in Cashmere Bouquet?

14 A. Yes, sir, I do.

15 Q. And do you also rely upon J&J internal document
16 from I.W. Sloan, dated March 31, 1976, finding
17 anthophyllite in the Cashmere Bouquet product?

18 A. Yes, sir, I do.

19 Q. And do you also -- have you also read and
20 reviewed the Colorado School of Mines 1973 analysis of
21 Cashmere Bouquet Sample Number 9 regarding the presence
22 of asbestos?

23 A. Yes, sir.

24 Q. So based upon everything that you've analyzed,
25 is there any question in your mind, Dr. Longo, that

1 there's asbestos historically found in Cashmere
2 Bouquet?

3 A. No, sir, there's not.

4 Q. Any question in your mind that asbestos's
5 historically found in Johnson & Johnson Baby Powder?

6 A. No, there's no question in my mind.

7 Q. Now, me and my law firm, Ms. Clancy's law firm,
8 are paying you for your time here today; correct?

9 A. Yes, sir. My company will send a bill.

10 Q. And MAS, what is -- what do they -- the hourly
11 rate for your time?

12 A. I charge \$550 an hour, no matter what I do,
13 either in litigation or out of litigation.

14 Q. And do you consult with and -- and testify at
15 the request of defendants in litigation?

16 A. Yes, sir, I do. But to be fair, actual
17 testimony, deposition and trials, is primarily for
18 plaintiffs, like 95 percent of the time.

19 Q. And does your -- my -- your hourly rate, does
20 that change whether or not you're hired by a company to
21 assist in litigation or whether they're hired by
22 Ms. Schmitz or somebody like me?

23 A. No. It's the same price for either side.

24 Q. J&J's -- the lawyers said that you've changed
25 your methodology regarding analysis of talc.

1 Have you done that?

2 A. No.

3 Q. J&J's lawyers said that you now call something
4 a bundle because it sounds more like asbestos.

5 Is that accurate?

6 A. No, that's not accurate.

7 Q. Is --

8 A. They're both regulated asbestos.

9 Q. Is --

10 A. A fiber is a regulated asbestos. A bundle is
11 regulated asbestos. It makes no difference which one
12 it is.

13 Q. Is -- is -- if there is a bundle of tremolite
14 that meets -- that has the chemical makeup, meets the
15 SAED to amphibole, and it's a bundle, is there any way
16 a scientist, based upon the methods, can call it a
17 cleavage fragment?

18 A. No, none. It doesn't make any sense. It's --
19 a cleavage fragment can't form a bundle. You're
20 breaking a rock, and you get pieces. It's like
21 breaking a glass bottle.

22 Now, all those pieces microscopy would have to
23 be perfect fibers all lining up together, in which
24 they're all pointed in the same direction, and they're
25 all touching. That is an impossibility, for a cleavage

1 fragment or to smash up a rock and -- and make a
2 bundle. There should be no dispute about that.

3 Q. J&J's counsel said that the concentration
4 method Dr. Longo uses simply does not work.

5 Is that true?

6 A. No, that's not true at all. It's -- it's -- it
7 works really well. I'm not the only one who's done
8 that. Alice Blount did it and published it in a
9 peer-reviewed paper. Johnson & Johnson was looking at
10 it all the way back in the '70s.

11 I don't know how it doesn't work, other than,
12 no, it can't find chrysotile asbestos. But that
13 doesn't eliminate the fact that it's very good at
14 concentrating amphibole asbestos, if present, at the
15 concentrations that it can find.

16 Q. J&J's counsel said, "Dr. Pooley concluded
17 45 years ago that the concentration method doesn't
18 work."

19 Have you seen any documentation where
20 Dr. Pooley, 45 years ago, said the concentration method
21 and the heavy liquid separation doesn't work?

22 A. No, sir. I've seen the opposite. He was
23 looking at patenting that method in England. That's
24 not something that you would say doesn't work, if
25 you're thinking about getting a patent.

1 Q. J&J's counsel said --

2 MR. CALFO: I object. Move to strike. That's
3 speculation. Pure speculation.

4 THE COURT: You may inquire on
5 cross-examination.

6 BY MR. SATTERLEY:

7 Q. J&J's counsel said, "he FDA discontinued the
8 concentration method because it doesn't work a long
9 time ago."

10 Have you seen any documentation from the FDA or
11 otherwise that said they dis- -- adopted or
12 discontinued the concentration method?

13 A. No. They sort of threw up -- I mean, what --
14 there's an explanation for that, if you would like me
15 to state what they actually said.

16 THE COURT: Just answer the question. If he
17 wants an explanation, he'll ask.

18 THE WITNESS: Sorry, Your Honor.

19 No.

20 BY MR. SATTERLEY:

21 Q. Couple other documents. Then I'm going to sit
22 down.

23 This is already into evidence. It's
24 Exhibit 163.

25 MR. SATTERLEY: May I approach, Your Honor?

1 THE COURT: You may.

2 MR. SATTERLEY: And I'll hand you both of these
3 documents at the same time. They're both into
4 evidence. This is 163, and this one is 313.

5 BY MR. SATTERLEY:

6 Q. And I want to ask you about Dr. Langer,
7 Dr. Arthur Langer. You personally met Dr. Arthur
8 Langer?

9 A. Yes, I have, a number of times.

10 Q. Is Dr. Arthur Langer a -- a mineralogist?

11 A. He is.

12 Q. And has Dr. Arthur Langer been associated years
13 ago with the Mt. Sinai School of Medicine?

14 A. He was at one point.

15 Q. And this first document I want to show you
16 is -- it's -- that you've seen -- you've seen these --
17 both these documents in the past; correct?

18 A. Yes, sir, I have.

19 Q. And in doc- -- this 163, July 9, 1971, does
20 this relate to Dr. Langer's analysis of talc back in
21 1971?

22 A. It does.

23 Q. And does Dr. Langer, in this 1971 J&J
24 memorandum, talk about analysis of talc by use of the
25 light and the electron microscope of Johnson's Baby

1 Powder?

2 A. It does.

3 Q. And does he -- does this J&J internal
4 memorandum talk about the meeting they had with
5 Dr. Langer, where Dr. Langer demonstrated his technique
6 for observing fibrous materials in the Johnson's Baby
7 Powder?

8 A. It does.

9 Q. And does this memorandum in 1971 talk about
10 Dr. Langer's finding talc and chrysotile in tissue in
11 1971 from folks being exposed to talcum powder product?

12 A. Yes, sir.

13 Q. And your lab has done analysis both those
14 products and on tissue; correct?

15 A. That is correct.

16 Q. And in this 1971 memorandum, does it say,
17 "Using electron microscopy, Dr. Langer has demonstrated
18 to me the presence of some very fine fibers at
19 moderately high magnification, which he identified as
20 chrysotile asbestos by the typical tubular appearance
21 of the fiber"?

22 Do you see that?

23 A. Yes, sir.

24 Q. And did we see in -- in some of the photographs
25 from Dr. Hutchinson at the University of Minnesota the

1 tubular appearance of chrysotile that's sort of --
2 that's being referenced there?

3 A. Yes, sir, that's true. It's actually tubular.
4 It looks like a straw, a soda straw, that you're
5 looking through.

6 Q. And he -- the summary of this internal J&J
7 document says, "Chrysotile is identified in the
8 electron microscope by its" characteristics --
9 "characteristic tubular appearance at high
10 magnification."

11 Correct?

12 A. Yes, sir.

13 Q. Now, the next document I want to ask you
14 about --

15 By the way, Dr. Langer is a noted mineralogist
16 that you've interacted with in meetings in the past;
17 correct?

18 A. Either in meetings or as an expert on the other
19 side of me.

20 Q. Okay.

21 A. Both ways.

22 Q. The next document I want to ask you about
23 relates to Exhibit 313. This is November of 1972, and
24 it's on Johnson & Johnson letterhead. It's into
25 evidence. And it's called "Antagonistic Personalities

1 in the Talc Story in the United States," and this is
2 written by Dr. Gavin Hildick-Smith, carbon copy to
3 Dr. Fuller, Dr. Nashed, Dr. Petterson, Dr. Sauchuk
4 Dr. Shelley, and Mr. Zeitz; correct?

5 A. Yes, sir.

6 Q. And they -- in this 1972 memorandum, they say,
7 "The increase in the profile of talc as a potential
8 health hazard has been actively promoted by a number of
9 individuals for a variety of reasons."

10 Then they go on to identify individuals, and I
11 want to ask you -- Dr. Selikoff, have you read many
12 papers from Dr. Selikoff at Mt. Sinai?

13 A. I have.

14 Q. Is Dr. Selikoff, in your opinion, a well-
15 regarded expert on asbestos -- asbestos and health
16 issues?

17 A. Yes, sir. He's considered the pioneer of all
18 that.

19 Q. It says, "Dr. Selikoff of Mt. Sinai Hospital,
20 who is an epidemiologist heavily involved with asbestos
21 and its adverse effects on health," he -- "has
22 observed (sic) considerable financing from a variety of
23 sources for research into the epidemiology of asbestos,
24 with particular reference to its industrial hazards.

25 "He retains a press agent on a full-time basis,

1 who gives him media exposure at regular intervals.

2 "Although he has stated that he doesn't believe
3 that talc is a health hazard and" larger -- "largely
4 concerns his activities with asbestos, he played a
5 significant role in the first talc meeting with the FDA
6 when he initiated proceedings by showing particularly
7 alarming pictures of patients suffering from cancer
8 relating to asbestos.

9 "It is believed that Dr. Selikoff wrote the
10 Merliss paper or at least edited it and provided
11 references for it. See attached."

12 My question to you, Dr. Longo: Have you read
13 and considered the Mt. Sinai work with regard to
14 asbestos in talc in the 1970s --

15 A. Yes, I have.

16 Q. -- what was published in the scientific
17 literature?

18 A. Yes, sir.

19 Q. And do you find that to be scientifically
20 useful in understanding the history of -- of asbestos
21 in talc?

22 A. Yes.

23 Q. They also have on their antagonistic
24 personalities list Dr. Langer, who works with
25 Dr. Selikoff and is a microscopist.

1 Do you consider yourself a microscopist?

2 A. Not an antagonistic one, no.

3 Q. Okay. But are you -- you're a -- a
4 microscopist; correct?

5 A. Yes, sir. I'm a material science engineer
6 that's spent a lot of time in microscopy. I'm a
7 microscopist, TEM microscopist, SEM. So yes.

8 Q. It says, "There are several other" --
9 "Dr. Selikoff's department who have the same mental
10 attitude as Dr. Selikoff."

11 Have you, over the course of your career, met
12 some of the other folks or -- or, I guess, read some of
13 the papers published by some of the other folks,
14 Dr. Arthur Rolfe, Dr. -- forgot the other names.

15 Have you read some of the other Mt. Sinai
16 studies?

17 A. Yeah. There was, you know, Ivan Rubin. There
18 was Dr. Rolfe. Obviously, Dr. Langer, who stands out
19 the most. But, yes, I have looked over Selikoff's
20 guys' works in the past.

21 Q. There are several other names here, and I'm not
22 going to go through them all, but I wanted to ask about
23 Dr. Lewin.

24 Dr. Lewin, who is a professor of analytical
25 chemistry at New York University, have you looked at

1 and considered Dr. Lewin's results and his findings of
2 asbestos in -- in talc?

3 A. Yes, sir, I have.

4 Q. They conclude, "We believe that the Selikoff
5 group, Mr. Kretchmer's group, Dr. Lewin, and
6 Dr. Weissler are in constant communication, although
7 there is some disagreement between Dr. Selikoff and
8 Mr. Kretchmer over Mr. Kretchmer's publicity and
9 Dr. Selikoff's research findings which were not
10 accurately presented in the newspaper."

11 My question to you is, have you ever taken all
12 the -- the reports that you've issued and put them in a
13 scientific journal?

14 A. Not yet, no.

15 Q. And have you just recently, in the past few
16 years, analyzed talc for the presence of asbestos?

17 A. Yes, sir. I only started doing that two years
18 ago.

19 Q. Okay. And prior to analyzing talc for the
20 presence of asbestos just a couple years ago, did you
21 know that Johnson's Baby Powder had asbestos in it?

22 A. I had no idea.

23 Q. Prior to analyzing the presence of asbestos in
24 Cashmere Bouquet just a few years ago, did you have any
25 clue whatsoever that it had asbestos in it?

1 A. Not until the 2015 paper came out and I was
2 talking to Dr. Millette and others, who were starting
3 to do this work. But before that, never considered
4 that talcum powder would have asbestos in it that --
5 that we're finding.

6 Q. When you said 2016 (sic), you mean the Gordon
7 paper in 2014?

8 A. 20- --

9 Q. 2014?

10 A. 2014, 2015.

11 Q. Okay.

12 A. That's when I started noticing it.

13 Q. And -- and prior to a couple years ago, when
14 you were analyzing this talc, had you ever had access
15 and reviewed the historical internal documents of
16 Johnson & Johnson regarding the presence of asbestos in
17 talc?

18 A. No, not until I got involved.

19 Q. And prior to just a couple years ago, had you
20 reviewed any internal company documents historically of
21 Cashmere Bouquet?

22 A. No, sir.

23 Q. Have all of the opinions been stated here
24 today, Dr. Longo, to a reasonable degree of scientific
25 certainty?

1 A. Yes, sir.

2 MR. SATTERLEY: I might have -- I may have
3 follow-up questions, depending on what questions these
4 folks ask you. Okay?

5 THE WITNESS: Sure.

6 MR. SATTERLEY: Thank you so much.

7 THE COURT: Mr. Calfo.

8 MR. CALFO: Yes, Your Honor.

9 CROSS-EXAMINATION BY MR. CALFO:

10 Q. Good afternoon, Dr. Longo.

11 A. Good afternoon.

12 Q. I'm just going to ask you one question right
13 off the bat.

14 A. Sure.

15 Q. You just told this jury under oath that you
16 have only started analyzing cosmetic talc two years
17 ago. Didn't you just tell the jury that under oath?

18 A. Let's see. 2017, 2018, 2019. Yes, sir.

19 Q. Okay. Good. We'll talk about that a little
20 bit later.

21 A. I guess two and a half years now.

22 Q. Okay. Let's start with a -- a few things, if
23 we could --

24 A. Yes, sir.

25 Q. -- that I told the jury in opening.

1 MR. CALFO: Your Honor, I would like to
2 publish, if I could, Defense Exhibit 421331.

3 MR. SATTERLEY: It's not in evidence,
4 Your Honor.

5 MR. CALFO: It's a demonstrative, Your Honor.

6 THE COURT: I haven't seen it.

7 MR. CALFO: May I -- may I approach?

8 THE COURT: Can we talk at sidebar.

9 (Whereupon, a sidebar between the Court and
10 counsel was had and not reported.)

11 BY MR. CALFO:

12 Q. Dr. Longo, what I am going to ask you is this:
13 Do you agree with this statement? You've never tested
14 cosmetic talc when you weren't being paid to do it by
15 the plaintiffs' lawyers; isn't that right, sir?

16 A. That is correct.

17 Q. And, in fact, you told the jury some numbers,
18 but isn't it true, Dr. Longo, that 100 percent of your
19 work in talc litigation is for the plaintiffs'
20 attorneys?

21 A. Yes, that's correct.

22 Q. In the last 30 years, working as an expert for
23 plaintiff law firms, you told us your company billed
24 \$30 million; is that right?

25 A. Yes, sir. About a million a year.

1 Q. In fact, you've testified before, Dr. Longo,
2 that the money you've made working as a litigation
3 consultant and expert witness has allowed your lab to
4 survive; isn't that right?

5 A. That's a true statement.

6 Q. And one of the things that you mentioned before
7 is, you've got to keep your lights on; right?

8 A. Yes, sir. If you work in the office, you need
9 to keep the lights on.

10 Q. And just so there's no mistake, you own
11 75 percent of your company, don't you?

12 A. Yes, sir, I do.

13 Q. And you billed \$30 million just to the
14 plaintiffs' lawyers; true?

15 A. I believe that's correct. For all the work we
16 do, all the different scientists that work on the
17 projects, yes, sir.

18 Q. You're not a geologist; true?

19 A. I do not have a degree in geology.

20 Q. And you don't have a degree in mineralogy, do
21 you, Dr. Longo?

22 A. No, I don't.

23 Q. So let me ask you this: If the plaintiffs'
24 lawyers, when they hired you, were looking for somebody
25 who had a degree in geology and mineralogy, that

1 wouldn't have been you, would it?

2 A. Well, if that was their criteria. I don't have
3 a degree in geology or mineralogy, so...

4 Q. Dr. Longo, you've never been to any of the
5 mines that you just told us about, have you?

6 A. No, sir, I haven't.

7 Q. And you mentioned -- I -- did you mention you
8 worked for NASA?

9 A. Yes, sir.

10 Q. Did you mention you work for ASTM?

11 A. I didn't mention I worked for NASA, but I have,
12 but I've never worked for ASTM.

13 Q. Okay. Well, the truth is, none of that work
14 that you had done that's on your resumé had anything to
15 do with testing cosmetic talc powder; isn't that right?

16 A. Yes and no. And I'll explain, if you like.

17 Q. Go ahead, Doctor.

18 A. No, it doesn't have anything to do with
19 analyzing cosmetic talc, per se, but it has everything
20 to do with the fact that we saw problems for scientists
21 for microscopic issues, and all of these studies that
22 we have done for all these different companies involved
23 some sort of development and understanding the problem
24 and using the best methodology.

25 So that's --

1 Q. Doctor, we're going to go --

2 A. -- that's the "yes and no" part.

3 Q. We are going to go through some of the
4 documents that you told the jury about with Johnson &
5 Johnson.

6 First of all, you don't know anyone at
7 Johnson & Johnson; you didn't work there. Right?

8 A. You're correct on that.

9 Q. All right. We'll get into that in a little
10 bit.

11 But before we do, no government agency has ever
12 asked you to test cosmetic talc; isn't that right, sir?

13 A. That's correct.

14 Q. And you've not written a written,
15 peer-reviewed, published paper anywhere in the world in
16 any way relating to cosmetic talc; isn't that right?

17 A. That's correct. We have not published these
18 results yet.

19 Q. And Doctor, if plaintiff lawyers were looking
20 for somebody who was well published in the scientific
21 literature on cosmetic talc, that would not have been
22 you, would it?

23 A. No, it would not.

24 Q. So let me ask you this. You told the jury a
25 little bit about your background in material science.

1 You remember that?

2 A. Yes, sir.

3 Q. You didn't take any courses whatsoever that
4 dealt with asbestos in undergraduate studies, did you?

5 A. That is correct.

6 Q. In other words, you didn't go to college to
7 study asbestos, did you?

8 A. No, sir, I didn't.

9 Q. In fact, you didn't become interested in
10 material science until after college; true?

11 A. Well, after my undergraduate degree, I -- my
12 whole life, I was going to be a veterinarian. I mean,
13 studied it, everything in my life since I was 6 years
14 old. Got my four-year degree and got rejected from
15 veterinary school. Couldn't believe it.

16 So I was looking -- I didn't have a Plan B, so
17 I was looking for a job, and the material science
18 department had an opening for a lab tech, because I had
19 to support myself.

20 Q. So Doctor, as I understand it -- --

21 A. And they invited me to be a graduate student
22 there, and I said, "No, no. I'm going to veterinary
23 school. I'm doing post baccalaureate."

24 And they said, "Well, I think maybe the board
25 would have a better idea" -- "it might be better if you

1 were in graduate school."

2 I said, "Ah, okay," and I never looked back.

3 So that's how I became a material scientist.

4 Q. And I thank you for that. Thank you for that,
5 Doctor. We appreciate it.

6 A. You're welcome.

7 Q. Now, you didn't take any courses that
8 specifically dealt with asbestos to get your master's,
9 did you?

10 A. No.

11 Q. Is that true?

12 A. That's true.

13 Q. And you didn't take a single class that dealt
14 specifically with asbestos during your Ph.D. work, did
15 you, Doctor?

16 A. Not per se, no.

17 Q. In fact -- I think Mr. Satterley asked you --
18 you're not a medical doctor; right?

19 A. No, sir, I'm not.

20 Q. And when we talk about Ms. Schmitz -- you don't
21 treat patients; true?

22 A. No, sir, I don't.

23 Q. And you didn't review any of Ms. Schmitz's
24 medical records; true?

25 A. That is true, I did not.

1 Q. And I think you told me under oath that you
2 cannot say one way or the other what caused
3 Ms. Schmitz' mesothelioma. True?

4 A. No, sir. I never talk about causation effects.
5 I let that -- others do --

6 Q. And --

7 A. -- debate or discuss that.

8 Q. And one of the things you told me in your
9 deposition -- in fact, I think you volunteered it --
10 is, you don't know where -- you are not going to opine
11 where her mesothelioma originated. True?

12 A. No, sir. I don't talk about medical issues.

13 Q. Okay. Now, you mentioned a little bit about
14 industrial hygiene; right?

15 A. Yes, sir.

16 Q. And you took no undergraduate or graduate -- or
17 graduate courses in industrial hygiene; isn't that
18 right?

19 A. That is correct.

20 Q. And you're not a certified industrial
21 hygienist; true?

22 A. That's true. I'm not.

23 Q. And you never took the test to be become
24 certified; correct?

25 A. That is correct.

1 Q. And -- and we're going to -- as I told you, we
2 are going to talk about some internal Johnson & Johnson
3 documents. You told us you never worked at Johnson &
4 Johnson; right?

5 A. That's still correct.

6 Q. And you don't know Dr. Hopkins personally;
7 true?

8 A. That's true.

9 Q. And you don't know any recipient of any of the
10 Johnson & Johnson documents, do you, sir?

11 A. No, sir, I don't.

12 Q. And you've never spoken to any of them, have
13 you?

14 A. No, sir, I haven't.

15 Q. So let's talk a little bit about your
16 testifying in asbestos litigation. And I think you
17 told us since 1989 or 1990. Is that correct, Doctor?

18 A. I think I gave my first deposition in '91 or
19 so; '92, maybe, the latest.

20 MR. CALFO: Let's pull up Defense
21 Exhibit 42125, which -- I think the plaintiffs had a
22 different exhibit, which was --

23 I can't remember. Do you remember, Counsel?

24 MR. SATTERLEY: It was a defense exhibit. It
25 was, I think, 199 or something like that.

1 MR. CALFO: Your Honor, can we fix it, get the
2 number? I have my exhibit, but I think the plaintiff
3 used his.

4 THE COURT: You can publish that one.
5 BY MR. CALFO:

6 Q. And Doctor, I don't want to belabor this too
7 much, but this was an advertisement you ran 30 years
8 ago. And you ran that ad also in the National Asbestos
9 Council magazine; true?

10 A. That's true.

11 Q. And did you tell the jury you weren't
12 advertising your litigation or lawsuit -- lawsuit
13 services here?

14 A. Yes, sir. I was advertising our final air
15 clearance and what a good job we did.

16 Q. So, even though you chose to picture yourself
17 in a courtroom in that photograph. That's true?

18 A. That's true.

19 Q. And you told the jury you were advertising your
20 laboratory services, but this photograph is not in your
21 fancy lab, is it, sir?

22 A. It's not in our lab, no.

23 Q. You're wearing a suit, aren't you?

24 A. Yes, sir.

25 Q. You're not wearing a lab coat; true?

1 A. That's still true.

2 Q. And your quote there, on the top, if we look,
3 it says, "Will your TEM laboratory's data make it
4 through the toughest meeting of your life?"

5 Do you see that, sir?

6 A. Yes, sir.

7 Q. And that meeting you're portraying is a
8 courtroom; true?

9 A. Yes, sir. If our client -- the data was
10 challenged and we had to go defend it for our client,
11 we would do it.

12 Q. So the meeting that you are portraying is there
13 in a courtroom; true?

14 A. That's true.

15 Q. Let's go to the next one.

16 "Not only" -- if we can find it there. "Not
17 only will the data stand up in court" --

18 MR. CALFO: Can we pull that up?

19 Let me put it on the Elmo.

20 MR. SATTERLEY: It's 1099.

21 BY MR. CALFO:

22 Q. "Not only will the data stand up in court, so
23 will the professionals who documented it."

24 Right?

25 A. Yes, sir. I think it's missing some stuff.

1 Q. I think I heard you tell Mr. Satterley that
2 language means standing up in court for final air
3 clearance samples.

4 Did you tell Mr. Satterley that?

5 A. Yes, sir.

6 Q. By the way, just so we're clear, final air
7 clearance samples, those are air samples taken from
8 buildings like schools where asbestos has been removed;
9 isn't that right?

10 A. That is correct.

11 Q. But, Doctor, you've never testified in court to
12 defend your air clearance results, have you?

13 A. No, sir, I haven't. We're that good.

14 Q. And if we look at the bottom of your
15 advertisement, it says, "Professional asbestos
16 consultants and contractors know that when the job
17 demands the best final air clearance testing by TEM,
18 you go to the people whose rigorous in-house quality
19 control measures produce TEM results and professional
20 support that stands up in the toughest tests you may
21 face." Isn't that right?

22 A. Yes, sir, that's what it states.

23 Q. And again, Doctor, what you're talking about
24 are the toughest tests you face in court; isn't that
25 true?

1 A. For clients who are taken in there, yes, sir.

2 Q. And, since this ad was run, your business in
3 litigation has really picked up, hasn't it, sir?

4 A. Since the ad, not really. It's -- had nothing
5 to do with getting involved in litigation a couple
6 years later.

7 Q. Well, since this ad ran in the National
8 Asbestos Council magazine, you've given about 3,000
9 depositions; right?

10 A. Yes, sir. Over 30 years, that's about correct.

11 Q. And you testify, on average, once or twice a
12 week; isn't that true, sir?

13 A. That is correct.

14 Q. And you've testified in front of juries just
15 like we have now hundreds of times, haven't you, sir?

16 A. Yes. That's correct.

17 Q. And you've been designated as an expert several
18 thousand times by plaintiffs' lawyers suing for money
19 in litigation, haven't you, sir?

20 A. That's probably correct, yes.

21 Q. And you've testified to this: You think every
22 plaintiff's attorney in the country lists you in any
23 type of asbestos litigation; isn't that right, sir?

24 A. Yes, sir, I think that's happened.

25 Q. Let's talk about some of the work you've done

1 for plaintiff law firms before you ever started working
2 on cosmetic talc. Okay?

3 A. That's fine.

4 Q. And by the way, you know, people have been
5 testing cosmetic talc for over 70 years; right?

6 A. That's what it looks like.

7 Q. And you just told the jury the first time you
8 ever got involved was two or three years ago; right?

9 A. Two and a half years ago, that's correct.

10 Q. But you've been doing asbestos litigation for
11 decades and decades and decades; isn't that right,
12 Doctor?

13 A. Over a few decades, yes, sir.

14 Q. For the better part of your career, Doctor,
15 you've run tests on asbestos-containing products;
16 right?

17 A. Yes, sir. That's my area of interest.

18 Q. And why don't you tell the jury about the
19 asbestos-containing products -- well, let me ask you
20 this: You've testified about asbestos-containing
21 automotive brakes; true?

22 A. That's true.

23 Q. Asbestos-containing boiler insulation?

24 A. That is correct.

25 Q. Automotive brake clutches?

1 A. Yes, sir.

2 Q. Compressors?

3 A. If it has a certain type of gasket in it, yes,
4 sir.

5 Q. Cement pipe?

6 A. Yes.

7 Q. Has a lot of asbestos in it, doesn't it?

8 A. 20 -- let's see -- runs anywhere from 15 to
9 22 percent asbestos.

10 Q. And we don't have it in the courtroom, but
11 there are ceiling tiles that have asbestos that you've
12 testified about; true?

13 A. That's -- in the past, that's correct.

14 Q. Floor tiles with asbestos in it?

15 A. Yes, sir.

16 Q. Gaskets have a lot of asbestos, don't they,
17 sir?

18 A. Industrial gaskets have quite a bit, about
19 70 percent. Anywhere from 65 to 85 percent depending
20 on what specification, what pressure, what temperature
21 it has to be at.

22 Q. Insulating cement. You testified about all the
23 asbestos in that, haven't you, sir?

24 A. Yes, sir.

25 Q. Joint compound?

1 A. That's correct.

2 Q. And joint compound is the stuff you put on your
3 construction walls?

4 A. For drywall, the seams. Typically known as mud
5 where they can take a seam, put drywall on it, sand it
6 to the point where you can't tell where that seam is
7 anymore, or nail hole, or what have you.

8 Q. I'm going to ask your help with this, Doctor.

9 What's Monokotay (phonetic)? I don't even know
10 how to say it.

11 A. Monokotay?

12 Q. Yeah. What is that?

13 A. Well, at this point I could just make up
14 anything. I think what you're trying to say is
15 Monokote fireproofing, Monokote 2 -- 1, 2, and 3.

16 Q. And that has asbestos in it?

17 A. Yes, sir. That was a fireproofing that was
18 manufactured by W.R. Grace from about 1961 to 1971.
19 Had approximately 10 percent chrysotile asbestos,
20 35 percent vermiculite, and 65 percent gypsum. Or
21 55 percent gypsum.

22 Q. Just to round this off, I don't want to take
23 too much time, but you've testified in cases because
24 pipe has insulation around it, with asbestos; right?

25 A. Yes, sir.

1 Q. Packing?

2 A. Yes.

3 Q. Textured paint?

4 A. Some textured paints do, not all.

5 Q. And wire has asbestos. You've testified about
6 that, haven't you?

7 A. Yes, sir. Primarily for defendants, because
8 for whatever -- because it doesn't release asbestos
9 like some of the other asbestos products.

10 Q. Now, you were paid by plaintiffs' attorneys in
11 lawsuits to test those asbestos-containing products,
12 weren't you?

13 A. No. I wasn't paid by defense -- plaintiffs'
14 attorneys to test the wire. That was defense
15 attorneys. And many of those tests we did on our own
16 for research. But some of those tests were paid for by
17 plaintiffs' attorneys.

18 Q. Doctor, you were hired to measure the amount of
19 asbestos those products have in them, weren't you?

20 A. In some cases, yes; in some cases, no.

21 Q. And of those products, most of them had
22 asbestos where the product was intentionally added as
23 part of its design; true?

24 A. That is true.

25 Q. And some of them, like the gaskets, I think you

1 told us, could contain as much as 85 percent asbestos;
2 true?

3 A. Industrial gaskets, that's very true.

4 Q. And that's different from a product that may
5 have a trace amount of asbestos as an accessory
6 ingredient; true?

7 A. It's different concentrations, that's true, but
8 a completely different type of product. One's been
9 manufactured with asbestos and you actually have to do
10 something to it to get high exposures.

11 The other one, even though there are trace
12 amounts, is a very fine powder that you shake out on to
13 your body every day if you use it continuously. So you
14 can't compare one with just a little bitty trace versus
15 one that has a lot of asbestos. It all depends what
16 you do to that one with all the asbestos.

17 Q. Doctor, what you've done for 30 years is you
18 come into court and you talk about all those
19 asbestos-containing products and all the dust and that
20 the people breathe; right? That's what you've been
21 doing. You've done tests on that.

22 A. Yeah. But you're kind of embellishing what I
23 do.

24 MR. CALFO: Your Honor, I move to strike.

25 THE COURT: He can answer the question.

1 MR. CALFO: Okay. Please do.

2 THE COURT: He's responding directly to your
3 question.

4 THE WITNESS: What I do is just don't go in and
5 say all this dust comes flying out. We look at
6 particular type of work practices. You can take an
7 asbestos gasket that has 70 percent asbestos in it,
8 pick it out, put -- it's new, put it on a flange, you
9 don't get exposed -- or you can't -- too low to measure
10 it. But when they take that gasket off at a later date
11 and use a power grinder at 4500 rpm that's using air
12 blowing around, yes, you get very high exposures.

13 What we're talking about here is powder that is
14 as fine as cement powder that you are putting on your
15 body. So you can't compare one has a lot of asbestos
16 in it versus another one that's a very fine powder
17 because of the asbestos content.

18 So it's different.

19 BY MR. CALFO:

20 Q. Well, let me -- for example, here, in some of
21 the Johnson's Baby Powder bottles you tested, you
22 detected no asbestos; right, Doctor?

23 A. That is correct.

24 Q. In fact, I told the jury in opening of the
25 bottles you claim to find asbestos in, the lowest

1 concentration was 0.0000033. Do you remember finding
2 asbestos of that amount, percent by weight?

3 A. Yes. By weight percent, yes.

4 Q. So we all know what we're talking about here,
5 just so we're clear, you've been talking all day about
6 Johnson's Baby Powder and Cashmere Bouquet; right?

7 A. Yes, sir.

8 Q. And so we all know what we're talking about
9 here today, when you talk about talcum powders used on
10 babies, you're talking about Johnson's Baby Powder;
11 right?

12 A. Yes, sir.

13 Q. And, in fact, of the bottles of Johnson's Baby
14 Powder you claim to find asbestos in, the highest
15 amount was 0.035; true?

16 A. By weight percent, not by fiber bundle count.
17 That's true.

18 Q. And before you got heavy into cosmetic talc
19 lawsuits in the last two or three years, about 35 to
20 40 percent of MAS's business came from consulting in
21 litigation; true?

22 A. That's true.

23 Q. But in the past year, your litigation
24 consulting increased to about 70 percent of your entire
25 business; isn't that right?

1 A. That is correct.

2 Q. And the jump from 40 to 70 percent is primarily
3 due to your work now in talc litigation, which is just
4 in the last two or three years; right, Doctor?

5 A. That is very true.

6 Q. Now, before we talk about your testing, let's
7 talk about what you were asked to do, okay?

8 It wasn't, I think you said, until 2016, or was
9 it 2017 that you started getting involved in cosmetic
10 talc litigation?

11 A. It was the end, I believe, of 2016 -- 2017 when
12 we -- after researching and picked the type of analysis
13 we were going to do and draw the heavy liquid. I think
14 it was early 2017 we started doing the first analysis.

15 Q. Okay, Doctor. And it wasn't until late 2016
16 when you were asked by Mr. Satterley that you got
17 involved in cosmetic talc litigation; right?

18 A. That is correct.

19 Q. And you've testified, I think you just told us,
20 under oath, that prior to 2016, you had never tested a
21 cosmetic talc powder at all for any reason; right?

22 A. I don't think so. I can't find any record of
23 cosmetic talc versus industrial talc.

24 Q. Where I'm going with this is, so if the
25 plaintiff lawyers, when they hired you, were looking

1 for somebody who had been in the practice of testing
2 cosmetic talc before 2016, that would not have been
3 you; right?

4 A. That's correct.

5 Q. In 2016 what happened is you received samples
6 of Johnson & Johnson talc from three plaintiff law
7 firms; right?

8 A. That's correct. 2016, 20' -- early 2017, I
9 think.

10 Q. Thank you, Doctor.

11 And one of the law firms that you received the
12 samples from was Mr. Satterley's firm and Ms. Clancy's
13 firm, the Kazan firm; true?

14 A. That is true.

15 Q. The other firm was the Lanier law firm?

16 A. That is true.

17 Q. And the other one I think you told us about was
18 the Simon Greenstone Panatier firm; true?

19 A. That is correct.

20 Q. And the plaintiff lawyers at that time didn't
21 just send you Johnson & Johnson talc to test, did they?

22 A. At some point we also received Cashmere Bouquet
23 and we've also received others. Avon, I believe; Jean
24 Nate, I think; certainly Chanel; and Beverly Hills --

25 Q. And by the way --

1 A. Giorgio Beverly Hills.

2 Q. By the way, you mentioned Avon. Is it your
3 opinion that all the Avon products that Ms. Schmitz
4 used had asbestos in them?

5 A. Based on our analysis of Avon products, I would
6 say more likely than not, yes.

7 Q. And, Doctor, on the very same day you were sent
8 the samples your lab purchased two bottles each of
9 Johnson's Baby Powder and Gold Bond; right?

10 You know what Gold Bond medicated powder is?

11 A. Yes, sir. I'm just trying to think. I think
12 you're correct.

13 Q. But you know -- or let me ask it this way: But
14 you knew from the very start, when you were hired, your
15 work was going to primarily involve Johnson & Johnson;
16 right?

17 A. That's what we were asked to test the most,
18 yes.

19 Q. Because it was clear to you the interest of
20 these plaintiff lawyers was in Johnson & Johnson --

21 MR. SATTERLEY: Objection, Your Honor.

22 THE COURT: Sustained.

23 BY MR. CALFO:

24 Q. In fact, almost one year after you got --

25 By the way, you got bottles of Cashmere Bouquet

1 in 2016 and 2017, didn't you?

2 A. 2017, yes, sir.

3 Q. Almost one year after you got the bottles of
4 Cashmere Bouquet and Gold Bond powder, you hadn't even
5 tested them after a year, had you?

6 A. No, I don't think so.

7 Q. Is that true?

8 A. That's true.

9 Q. And when these three plaintiff law firms came
10 to you -- and they paid you to test the Johnson's Baby
11 Powder; right?

12 A. Yes, sir. Like with all clients, when we agree
13 to do work, we -- we will bill them for our work.

14 Q. And when these three plaintiff law firms came
15 to you, Doctor, and they paid you to test the bottles
16 of Johnson's Baby Powder, they asked you to look for
17 amphiboles; right?

18 A. Yes, sir.

19 Q. And plaintiffs' attorneys didn't say to you,
20 look for asbestos or asbestiform amphibole, they just
21 told you to look for amphibole; right?

22 A. I'm trying to remember back. They were just,
23 you know, look to see if there's any regulated asbestos
24 in the product is what I believe happened. And that's
25 what we did. We didn't choose or pick what regulated

1 asbestos was in there. We just analyzed what was
2 there.

3 Q. Doctor, do you remember testifying in a case
4 called *Blinkinsop*?

5 A. Yes, sir, I think so.

6 MR. CALFO: Your Honor, just to make this --
7 we're getting to the end of the day -- may I show the
8 witness the testimony to see if it refreshes his
9 memory?

10 MR. SATTERLEY: Can I get a copy?

11 MR. CALFO: Of course. You can look at it.

12 THE COURT: What page are you showing?

13 MR. CALFO: I'm showing the witness page 215.

14 MR. SATTERLEY: 250?

15 MR. CALFO: 215.

16 BY MR. CALFO:

17 Q. Doctor, please just look at page -- lines 10
18 through 12, okay? And let me just ask you this,
19 Doctor: The plaintiffs' lawyers didn't ask you to look
20 for asbestos, they asked you to look for amphiboles;
21 right?

22 A. That's what it states, yes.

23 Q. And not all amphiboles are asbestos; true?

24 A. That's true.

25 Q. In fact, there are asbestos varieties that --

1 maybe I'll do it this way: You've seen the chart of --
2 have you -- well, let me -- let me publish what -- we
3 can't publish it until I get --

4 THE COURT: That's the one you used in opening
5 statement?

6 MR. CALFO: Yes, Your Honor.

7 THE COURT: You can publish it.

8 BY MR. CALFO:

9 Q. This is just for -- Doctor, I want you to help
10 us educate the jury real quickly, if we could.

11 Now, asbestos varieties are on the left and
12 nonasbestos varieties are on the right.

13 Do you see that, sir?

14 A. I see that's what it states.

15 Q. And, for some, the asbestos version and
16 nonasbestos versions have different names; right,
17 Doctor?

18 A. Yes, sir.

19 Q. So, for example, if we look on the right, the
20 nonasbestos form is called riebeckite and the asbestos
21 form on the left is crocidolite; right, Doctor?

22 A. That's what it states.

23 Q. And there are asbestos types of tremolite and
24 nonasbestos types of tremolite; right, Doctor? Just
25 generally.

1 A. Well, yeah, depending if it's just pieces of
2 rock of tremolite versus fibrous, that would be
3 correct.

4 Q. So let me just ask it. There are asbestos
5 types of tremolite, there are nonasbestos types of
6 tremolite; right, Doctor?

7 A. Yes. The same mineral, the same chemistry,
8 same everything except one is pieces of rock, the other
9 is fibrous.

10 Q. And sometimes the nonasbestos tremolite can be
11 referred to as common or massive tremolite; right?

12 A. Sometimes, yes.

13 Q. And sometimes nonasbestos tremolite can be
14 referred to as just tremolite; right?

15 A. Typically not, at least not in my area. When
16 you say "tremolite," you either have to define it as
17 tremolite nonasbestiform or cleavage fragment tremolite
18 or tremolite asbestos. Not called just "tremolite." I
19 don't agree with that.

20 Q. Well, let me -- let me just ask you this:
21 There are asbestos types of anthophyllite; true?

22 A. Fibrous anthophyllite, which is asbestos.

23 Q. And nonasbestos types of anthophyllite; true?

24 A. True if it is, in fact, pieces of cleavage
25 fragment, not fibrous, that's true.

1 Q. And so, Doctor, if you were asked to look for
2 amphiboles and not asbestos, what you were asked to do
3 is look for any of the amphiboles, not just on the left
4 side but also the nonasbestos versions; right?

5 A. We looked to characterize it if it had cleavage
6 fragments versus asbestos. We -- we characterize what
7 is present. Not just looking for one thing or the
8 other.

9 Q. Well, staying with this chart, you also were
10 not asked to look for chrysotile asbestos, were you?

11 A. It's been too long. I just don't recall.

12 Q. Maybe we can talk about that tomorrow, because
13 we've got four minutes.

14 Now, Doctor, we've heard and will likely hear
15 of testing --

16 MR. CALFO: And maybe, since we don't have
17 time, I'll move on, Your Honor.

18 THE COURT: It's your cross-examination.

19 MR. CALFO: So I move to strike the question.

20 BY MR. CALFO:

21 Q. Doctor, you've analyzed about a hundred bottles
22 of Johnson's talcum powder; right?

23 A. 107.

24 Q. And you've never reported finding any
25 chrysotile; right?

1 A. That's correct. You wouldn't for this -- using
2 this protocol.

3 Q. And that's because one of the drawbacks of the
4 concentration method -- or I think you called it the
5 Blount method; is that right?

6 A. Well, there's the concentration method, Blount
7 PLM, and then ISO 22262-2 is the talc heavy density
8 liquid method for PLM, TEM, and SEM.

9 Q. So where I'm going with this is one of the
10 drawbacks of the concentration method is you can't find
11 chrysotile; right?

12 A. That's correct.

13 Q. So now, I think you also conduct PLM tests
14 without the concentration method; is that true?

15 A. That's true.

16 Q. And to this day, using that method, you still
17 haven't found chrysotile in the Johnson's talc; true?

18 A. That's true.

19 Q. And one thing I think you criticized Johnson &
20 Johnson for doing was not adopting the concentration
21 method. Right?

22 A. That's right.

23 Q. To this day, the concentration method has not
24 been adopted or approved by any regulatory agency in
25 the United States; right, Doctor?

1 A. That is correct.

2 Q. That would include the EPA; right?

3 A. Heavy density liquid they don't recommend, but
4 they do have other concentration methods that they have
5 laid out from acid dissolution to remove soluble
6 materials to muffle furnace to remove polymer or
7 plastic-type materials. So it concentrates, just not
8 heavy liquid density.

9 Q. That would include the Mine Safety and Health
10 Administration; correct, Doctor?

11 A. That is correct.

12 Q. And that would include the Occupational Safety
13 and Health Administration, or OSHA; true?

14 A. That is true.

15 Q. All right.

16 MR. CALFO: Your Honor, I'm going into a new
17 area. Would this be an appropriate time? I hate to
18 ask the Court, but I am --

19 THE COURT: We'll go home on that one.

20 MR. CALFO: Thank you, Your Honor.

21 THE COURT: Ladies and gentlemen, we're going
22 to end for the day. We'll see you back here tomorrow
23 morning. We'll get started again with the
24 cross-examination of this same witness.

25 Have a pleasant evening. Don't forget the

1 admonition that it's your duty as jurors not to
2 converse amongst yourselves or with anyone else on any
3 subject connected with the trial or to form or express
4 any opinion thereon until the matter is submitted to
5 you.

6 Have a pleasant evening.

7 (Whereupon, the following proceedings were held
8 outside the presence of the jury:)

9 THE COURT: The jurors have departed the
10 courtroom.

11 THE WITNESS: Your Honor, may I be excused?

12 THE COURT: Until tomorrow. You've got to be
13 back here.

14 THE WITNESS: Oh, I'll be back.

15 MR. SATTERLEY: Leave everything except your
16 report -- anything you brought you can take with you.
17 Anything that was presented to you, leave it.

18 THE WITNESS: It's right here. I haven't taken
19 any of that.

20 THE COURT: All right. Is there anything we
21 need to put on the record regarding today's proceeding?

22 MR. SATTERLEY: The only thing, at the end of
23 the day, Your Honor said, the Scala exhibits --

24 THE COURT: We'll get to that.

25 Mr. Calfo, Mr. Sharp, is there anything we need

1 to put on the record?

2 MR. GARY SHARP: No, Your Honor.

3 MR. MULARCZYK: No, Your Honor.

4 THE COURT: All right. Let's move on to the
5 exhibits that Mr. Satterley would like to offer into
6 evidence.

7 What would you like to offer into evidence,
8 Mr. Satterley?

9 MR. SATTERLEY: I'm sorry?

10 THE COURT: What would you like to offer into
11 evidence?

12 MR. SATTERLEY: Your Honor, I apologize. I
13 don't have at my fingertips the disputed exhibits here.
14 Yes.

15 The disputed exhibits are Trial Exhibit 3573,
16 3574, 3577, 3578, 3580, 3581, 3582, 3588, 3590, 3592,
17 3593, 3594, 3595, 3596, 3597, 3599, 3600, 3601, 3603.
18 3604, and 3611.

19 THE COURT: All right. You can keep that.

20 MR. MULARCZYK: Do you have a set of the
21 documents to look at as we go through each one? Okay.

22 THE COURT: All right. Do you have any
23 objection to those?

24 MR. MULARCZYK: Yes, Your Honor. It would help
25 me -- I don't have that list in front of me. I have

1 the ones that we've submitted objections to based on
2 the exhibit number for the deposition. If we could
3 go --

4 THE COURT: I can coordinate.

5 Number 6 on the Scala deposition is 3573.

6 MR. MULARCZYK: Correct. Our objection to this
7 is based on authenticity, hearsay, and relevance.

8 THE COURT: All right. First -- the first
9 thing is that -- authenticity. The witness testified
10 that this is a document from the National Safety
11 Council but claimed that she'd never seen it before.

12 MR. MULARCZYK: And part of the problem with
13 almost all of the documents to which we've objected to
14 is exactly that position. They were documents that
15 were put in front of her that she'd never seen before,
16 and so --

17 THE COURT: I understand. Ms. Clancy or
18 Mr. Satterley, what is the authenticity that has been
19 demonstrated to the Court regarding Exhibit 3573?

20 MR. SATTERLEY: Your Honor, this was produced
21 by Colgate in response to discovery, number one.
22 Number two, we cite to the Evidence Code 1414. It's
23 authentic because it's in a monthly periodical and
24 Colgate has admitted that they're continuously a member
25 of the National Safety Council since 1911. We believe

1 that, because it was in a monthly periodical, that is a
2 presumption of authenticity. And so we believe this is
3 admissible. And we cite to, I think, in our -- the
4 *Greenspan* case and also to the *StreetScenes v. ITC*
5 *Group* case, 103 Cal.App.4th 233. As well as Evidence
6 Code Section 645.

7 THE COURT: Okay. You're mixing more than just
8 authenticity here. That's okay.

9 Mr. Mularczyk, why isn't this a document that
10 was in the possession of your client who was a member
11 of the organization that published this document and
12 why isn't it relevant to show what they knew and when
13 they knew it?

14 MR. MULARCZYK: Well, to address the first
15 point, nothing that Mr. Satterley said is actually
16 evidence. There is -- nobody has testified that this
17 was a monthly periodical, that Colgate was receiving
18 it, that Colgate was aware of it. This was a document
19 that was passed in front of Ms. Scala for the first
20 time in front of her deposition, and then --

21 THE COURT: I understand. She's testifying for
22 Colgate, and it was in Colgate's possession, but she'd
23 never seen it before.

24 MR. MULARCZYK: Nobody has said that. There's
25 been no evidence --

1 THE COURT: Mr. Satterley just told me that it
2 was produced by Colgate in the production of documents.

3 MR. MULARCZYK: As an attachment to the
4 exhibit. As an exhibit to her deposition transcript.
5 We produced her deposition transcript in the exhibit
6 that was attached to it.

7 What's important --

8 THE COURT: Oh, all right. Let me get that
9 straightened out.

10 Mr. Satterley, was this produced by Colgate in
11 a request for production of documents or was this
12 produced by you at the deposition and then?

13 MR. RIVAMONTE: Your Honor, Ian Rivamonte for
14 the plaintiff. It was produced by Colgate in response
15 to plaintiff's document requests as set forth in our
16 brief.

17 MR. MULARCZYK: Let me make something clear.
18 The document production --

19 THE COURT: You had it in your possession to
20 produce it; right?

21 MR. MULARCZYK: We received this because we had
22 a copy of her transcript with the exhibits attached to
23 her transcript. That's how we received a copy of this.
24 I think it's --

25 THE COURT: Wait. I'm hearing two different

1 things. I'm hearing that the lawyers for Colgate
2 brought it to Ms. Scala's deposition.

3 MR. MULARCZYK: No.

4 THE COURT: Isn't that what you just told me?

5 MR. RIVAMONTE: No, Your Honor. During
6 Ms. Scala's deposition, it was the plaintiffs' counsel
7 in that case. The *Polakow* case that brought it.

8 THE COURT: I don't much care who produced it.
9 Unless it was Colgate.

10 MR. RIVAMONTE: Colgate did produce it,
11 Your Honor, in response to plaintiff's discovery
12 request in this case.

13 THE COURT: Got it. Okay.

14 All right. Mr. Satterley, how is this an
15 authentic document?

16 MR. SATTERLEY: Well, we -- number one, we
17 believe that they produced --

18 THE COURT: They haven't admitted it.

19 MR. SATTERLEY: No, I don't believe they have
20 admitted it. We believe that they produced it in
21 response to our discovery request asking to produce all
22 documents regarding what they knew or should have
23 known, and they produced this document.

24 They should have or could have as -- not
25 produced it and said they didn't. It's not a document.

1 It is a periodical. The Court -- you know, there's --
2 I apologize, Mr. Rivamonte, I've been working
3 with Dr. -- asking questions of Dr. Longo all day, so
4 my mind's -- beside myself right now. Can you help me
5 out.

6 MR. RIVAMONTE: Yes, I can.

7 May I, Your Honor?

8 THE COURT: Sure. Of course.

9 MR. RIVAMONTE: So Evidence Code Section 645.1
10 has a presumption that a periodical published more than
11 regular issue in average intervals not exceeding three
12 months is presumed authentic.

13 Here, Your Honor, Exhibit 35' -- I believe it's
14 3573 or Scala Exhibit 6, if you look at the contents
15 page of that, if you look at my trial brief, the
16 plaintiff's trial brief, my declaration, Exhibit E, the
17 contents page says that it's a monthly periodical of
18 the National Safety Council. Therefore, under Evidence
19 Code 645.1, there is a presumption that it is authentic
20 and now the burden shifts to Colgate to prove that it
21 is not.

22 THE COURT: All right. Presuming that it's an
23 authentic periodical, how is it relevant when the
24 corporate representative testifies that she doesn't --
25 she's never seen it before? Colgate has never seen it

1 before.

2 MR. SATTERLEY: Knew or -- okay.

3 MR. RIVAMONTE: Your Honor, it is relevant to
4 know this. In *People v. ConAgra*, *ConAgra* was -- for
5 example, in that case, *ConAgra* was a member of several
6 trade organizations. Those trade organizations issued
7 periodicals and other reports about the hazards related
8 to *ConAgra's* product. In that case the appellate court
9 found that, for the purposes of notice, those -- those
10 publications from those trade organizations in which
11 *ConAgra* belonged in is deemed notice of knowledge of
12 the actual hazard in the product. Here it is the same
13 thing. National Safety Council, Colgate was a member
14 and therefore there is at least notice here since
15 Colgate was a member that -- of asbestos-related health
16 hazards as set forth in that National Safety Council
17 publication.

18 THE COURT: Well, how do you bridge the gap
19 between the witness testifying for Colgate that says
20 that Colgate's never seen this before, that they didn't
21 have it in their possession?

22 MR. RIVAMONTE: Under --

23 THE COURT: In *ConAgra* they had all that stuff
24 in their possession, didn't they?

25 MR. RIVAMONTE: Yes. But in

1 *Anderson v. Owens-Corning*, the standard is knew or
2 should have known. So even though -- if Ms. Scala
3 claims that she does not -- or Colgate does not know of
4 this document in particular, it should have known it
5 based on its membership in the National Safety Council
6 during that time.

7 Colgate was a member of that council for, I
8 think since its inception, if I recall correctly.

9 And Colgate was also a member of several
10 committees in the National Safety Council, some of
11 which relate to asbestos, as I recall correctly.

12 So, for that reason, Your Honor, it's a
13 should-have-known standard. Knowledge would be great.
14 Actual knowledge would be fantastic, but we're not --
15 for purposes of notice and purposes of
16 *Anderson v. Owens-Corning*, the should-have-known
17 standard applies.

18 THE COURT: Is that correct about Owens' claim?

19 MR. MULARCZYK: No, Your Honor. You can't --
20 the way it works with authenticity and with the known
21 or knowable standard is you can't simply make the
22 argument and say so and then that's the case. That's
23 not how it works. You actually have to submit evidence
24 and make a connection between the defendant and the
25 topic or the harm or the injury that they should or

1 should have been aware of. There is nothing in this
2 document, there is no evidence that's been presented in
3 this case that Colgate had receipt of this document,
4 that this document should have told Colgate anything or
5 that it should have advised him of any harm or injury.
6 There's just no connection here. There's nothing at
7 all.

8 MR. GARY SHARP: Your Honor, if I might,
9 because I've been around forever, I know these
10 documents from a historic state-of-the-art standpoint.
11 It's not true. Colgate is not mentioned anyplace in
12 any of the National Safety Council pages, either by way
13 of membership, either by way of board of directors,
14 either by way of membership on a committee. If
15 Mr. Rivamonte can show us that we were on a committee,
16 then we can have that discussion. I've never seen it.

17 We have a list of every publication that was
18 maintained by Colgate, which was attached to the
19 deposition as Exhibit Number 5, which has been admitted
20 into evidence, the National Safety Council or the
21 *National Safety News* does not appear on this list.

22 These were not within Colgate's possession.

23 THE COURT: All right. The objection is going
24 to be sustained on this one.

25 Let's move to the next one, 3574, Number 7.

1 MR. MULARCZYK: The same.

2 MR. GARY SHARP: Same objection.

3 MR. RIVAMONTE: Your Honor, I would like to
4 reiterate here. At this stage we're talking about
5 authenticity. And it's a very low standard. The
6 question is whether the document produced or at issue
7 is fake.

8 THE COURT: The difficulty is that you have --
9 you may have a document that is an authentic newspaper
10 article, but you have a witness from the company saying
11 that they never saw it before, that the company had
12 never seen it before. That's the -- the difficulty is
13 not so much that it's -- it says that it's a magazine
14 article and, on the face of it, it says that it's
15 published more than X-number of times. But the problem
16 here is that there's evidently no evidence that Colgate
17 had it in their possession so that they can be charged
18 with having knowledge of what it said.

19 Maybe that wouldn't be true for *The New York*
20 *Times*, but for something like this, I'm going to
21 sustain the objection to that one as well.

22 Moving on. Your next one is 3577. The
23 objection is sustained on that one. That's my motion
24 in limine. Actually, let's go back.

25 Do you want to argue that one?

1 MR. MULARCZYK: Well, Your Honor, I would...

2 MR. GARY SHARP: Again, Your Honor, we have
3 within our documents the volumes of the *New England*
4 *Journal of Medicine* that we maintained. It was well
5 after this date. We did not have this. It was not in
6 the possession of Colgate, and, again, there was no
7 reason for us to have had this document. Ms. Scala was
8 not aware of it until it was presented to her at
9 deposition.

10 MR. MULARCZYK: And, yes, this was the subject
11 of the motion in limine.

12 THE COURT: How does this -- we made a ruling
13 on the motion in limine that there would not be
14 children dying of inhalation of talcum powder, of
15 aspiration of talcum powder. The motion -- the
16 objection is sustained for 3577.

17 The next one is 3578, which is Number 11.

18 MR. GARY SHARP: Again, National Safety
19 Council, Your Honor.

20 THE COURT: And it was -- and the witness was
21 emphatic that this was not received by Colgate.

22 MR. RIVAMONTE: I stand by my previous
23 arguments, Your Honor.

24 THE COURT: So that's sustained as well.

25 The next one is 3580, an article from *The New*

1 *York Times*.

2 It's certainly relevant.

3 MR. GARY SHARP: Your Honor, we have no
4 objection.

5 THE COURT: All right. That one will be in
6 evidence.

7 (Whereupon, Plaintiff's Exhibit 3580 was
8 admitted into evidence.)

9 THE COURT: The next one after that is 3581,
10 which is -- corresponds to Number 14, which is -- which
11 are OSHA rules and regulations, which is -- it's the
12 law.

13 What would be your objection?

14 MR. GARY SHARP: Your Honor, with respect to
15 OSHA, I have no objection as long as the entire code
16 section is attached.

17 THE COURT: Now, this is...

18 MR. SATTERLEY: Well, wait a second. I would
19 object --

20 THE COURT: It's three pages long.

21 MR. SATTERLEY: I would object to them
22 putting --

23 THE COURT: Hold on.

24 The exhibit is the exhibit.

25 Do you have an objection to the way the exhibit

1 exists at this point in time? Is it only part of an
2 exhibit that includes other relevant, pertinent
3 material?

4 MR. GARY SHARP: Your Honor, if we can meet and
5 confer with plaintiffs. The problem is the copy I have
6 I can't read it, and I think between us we should be
7 able to come up with a clean copy.

8 THE COURT: Maybe you should just let it go.
9 The jury won't be able to read it either.

10 MR. GARY SHARP: That is absolutely true and...

11 THE COURT: In any event, I don't mind letting
12 him talk about it, and if you want to get a cleaner
13 copy, Mr. Satterley, you can do that.

14 MR. GARY SHARP: Thank you, Your Honor.

15 THE COURT: The next one is 3582, corresponding
16 to Number 15. What's the objection to this?

17 MR. MULARCZYK: Hearsay, Your Honor. It's
18 just -- it's a report of finding by Dr. Lewin in
19 testing that he had done, so we object on the basis of
20 hearsay.

21 THE COURT: All right.

22 (Whereupon, Plaintiff's Exhibit 3582 was marked
23 for identification.)

24 MR. RIVAMONTE: Your Honor, this letter is
25 admissible under the hearsay rules. Number one, it's

1 an ancient document. It's over 30 years old. In the
2 *ConAgra* case again, the authors of this document is
3 presumed to have known what they were talking about and
4 it's been typically relied upon. And, number two, it's
5 also admissible under the official -- the government
6 records hearsay exception because this was a document
7 drafted by the FDA and it's between two FDA employees.
8 So under, I believe it's 1271, it is admissible for
9 that purpose -- I'm sorry, 1280.

10 THE COURT: It wasn't drafted by the FDA. It
11 was directed to the FDA. It was drafted by Seymour
12 Lewin, a professor of chemistry someplace.

13 MR. RIVAMONTE: Let me check, Your Honor.
14 3583, Your Honor.

15 MR. SATTERLEY: No. 3582; right?

16 THE COURT: This is 3582.

17 MR. SATTERLEY: 3582. Exhibit 15.
18 Here it is.

19 MR. RIVAMONTE: So, Your Honor, this is also
20 admissible for notice purposes because this document
21 was produced by Colgate and it was in Colgate's
22 possession at the time.

23 THE COURT: It was produced by Colgate in
24 the --

25 MR. RIVAMONTE: Response to discovery,

1 Your Honor.

2 THE COURT: All right. Is that right, that
3 Colgate had this document in their possession?

4 MR. MULARCZYK: No. Again, this is information
5 that was received during the course of depositions of
6 corporate -- corporate witnesses, so -- here's my --

7 Here's another take I have on this, Your Honor.

8 So there was a follow-up -- two follow-up
9 studies that were done, one by Dr. Lewin and one by the
10 FDA, on these exact same samples that they want to
11 introduce into evidence now.

12 So to the extent they're asking for this one to
13 be admitted, there are two follow-ups that say the
14 complete opposite in his final rulings that should be
15 admitted as well.

16 So to the extent that the Court is inclined, if
17 this comes in, then it certainly opens the door to all
18 of it, but our position -- the position we're
19 maintaining is that this was produced as part of
20 deposition transcripts when these documents were shown
21 to corporate representatives at depositions. What we
22 produced were the transcripts along with the exhibits
23 that were previously produced by plaintiffs. These
24 were not in possession of Colgate prior to that time.

25 So, in our view, that's the position we

1 maintain, but -- leave it at that.

2 THE COURT: All right.

3 MR. SATTERLEY: I just want to verify. So it's
4 Colgate's position that, even though it's produced in
5 response to discovery with the Quinn Emanuel Bates
6 Number QECPC2, and it has several numbers, it's
7 Colgate's position that those Bates numbers don't mean
8 anything, and I just want to clarify that's Colgate's
9 position with regard to this because it was our
10 understanding that that came from the repository with
11 the Bates numbers on it. But now Colgate has taken a
12 new position I've never heard of before.

13 THE COURT: Well, I am just trying to figure it
14 out here. Did this...

15 MR. GARY SHARP: Your Honor.

16 THE COURT: Which is it?

17 MR. GARY SHARP: So, under discovery
18 obligations, a --

19 THE COURT: I understand that. The question
20 is --

21 MR. GARY SHARP: What we received in the course
22 of litigation these were not in the Colgate files.
23 These were received during the course of litigation by
24 counsel and then were attached to depositions where
25 people have been asked about them.

1 THE COURT: All right. Mr. Satterley?
2 Mr. Satterley, did you receive this as a business
3 record or just one of those general "all documents that
4 you may have"?

5 MR. SATTERLEY: Well, Your Honor, they were
6 produced in response to our discovery and I -- you
7 know, it sounds like its Colgate's position that
8 there's no identifying marks or numbers or Bates
9 numbers that would demonstrate what they are. So we
10 believe that it's -- the one that I have -- I have one
11 with Bates numbers on them. His copy doesn't have
12 Bates numbers on them. Mine has Quinn Emanuel Bates
13 numbers on them.

14 MR. GARY SHARP: And, Your Honor, in the --

15 MR. SATTERLEY: So it's my -- other Colgate
16 counsel told me in the past that if it has the Quinn
17 Emanuel Bates numbers on it, it's part of their
18 repository, but it's now Colgate's taken the position,
19 that's fine. That just puts me on notice where they
20 are with regards to other documents, so.

21 THE COURT: All right. So I'm going to accept
22 as true that they did not have this document back in
23 1972.

24 MR. SATTERLEY: If we prove otherwise, we'll
25 bring it to the Court for reconsideration.

1 THE COURT: All right. And so that one the
2 objection is sustained.

3 The next one is 3588, which corresponds to 21,
4 which is the CTFA minutes.

5 What's the objection to this?

6 MR. GARY SHARP: Your Honor, this is a CTFA
7 document. We're not going to challenge authenticity
8 because I'm assuming at some point somebody from the
9 CTFA has probably produced this. It was not a document
10 that was ever in the Colgate files. This document
11 actually came from Whittaker Clark & Daniels. We are
12 not challenging authenticity, though, however.

13 THE COURT: Wasn't the testimony that Colgate
14 was involved with this CTFA?

15 MR. GARY SHARP: Yes. Colgate was a member of
16 the CTFA. This happens to be something that Colgate
17 was not present at and there is no indication that this
18 document was ever sent to and/or received by Colgate.

19 MR. MULARCZYK: And, as a matter of course, we
20 stipulate on the CTFA documents where it indicates we
21 were present. We don't dispute those. The ones that
22 raise concern for us are the ones in which we weren't
23 present.

24 THE COURT: All right. I am persuaded that it
25 should be allowed in. So the objection is overruled.

1 (Whereupon, Plaintiff's Exhibit 3588 was
2 received into evidence.)

3 The next one is 3590, which corresponds to 23.

4 MR. RIVAMONTE: This is another CTFA document,
5 Your Honor. It's a news release.

6 THE COURT: Is there an objection to this one?

7 MR. GARY SHARP: Other than your name is on it.
8 But no, Your Honor.

9 THE COURT: I also find that objectionable.

10 MR. GARY SHARP: Let the record reflect there
11 was laughter in the courtroom.

12 THE COURT: That one will be in evidence.

13 (Whereupon, Plaintiff's Exhibit 3590 was
14 received into evidence.)

15 THE COURT: The next one is 3592. The Sinai
16 study.

17 What's the objection to this one?

18 MR. MULARCZYK: Same thing as for Dr. Lewin.
19 It's hearsay.

20 MR. SATTERLEY: Well, Your Honor, this is --
21 this goes to notice, exception to the hearsay rule,
22 issue of notice. This is a published study regarding
23 the very product at issue in this case, that the
24 corporate representative admitted that they knew that
25 it was going on at the time, and this, at the very

1 least, should come in for the issue of notice.

2 MR. RIVAMONTE: Similar to *The New York Times*
3 article, Your Honor. This is a publication in a
4 medical journal -- or a scientific journal, I should
5 say.

6 MR. SATTERLEY: *Journal of Toxicology and*
7 *Environmental Health.*

8 THE COURT: It's really a question of whether
9 they had notice at the time, and I'm persuaded that
10 they had notice at the time.

11 MR. GARY SHARP: Your Honor, if I might, this
12 is similar to every medical article which might come up
13 in a trial with respect to medical, and they're
14 referred to, certainly. They're quoted from. They
15 don't come into evidence because they're still
16 inadmissible hearsay.

17 THE COURT: I don't disagree with that, but the
18 distinguishing factor is that with the Sinai group it
19 was a *New York Times* article and then there was
20 interaction between the industry group and the people
21 who wrote the article.

22 MR. GARY SHARP: Certainly.

23 THE COURT: And that's where it distinguishes
24 this, that it was a bone of contention and it was
25 maneuvering, if you will, around what was -- what was

1 printed.

2 MR. GARY SHARP: Well, again, Your Honor, what
3 we're doing is we're now sending back to the jury room
4 to lay people medical or scientific articles that have
5 been testified to by the experts and have been
6 explained by the experts. We don't send the textbooks
7 or the articles back to the jury room.

8 THE COURT: I agree with that. This isn't one
9 of those.

10 MR. GARY SHARP: Thank you, Your Honor.

11 THE COURT: This is something that was
12 published, that the industry group addressed it. And
13 it's the fact that the industry group addressed it that
14 makes it what's in there. And it is hearsay, no
15 question about it. But it goes to notice, not to the
16 truth of the matter.

17 MR. GARY SHARP: Thank you, Your Honor.

18 THE COURT: So that's 3592 -- and, actually,
19 3593 can both be admitted into evidence, because I'm
20 going to presume that it is the same.

21 (Whereupon, Plaintiff's Exhibit 3592 was marked
22 for identification.)

23 (Whereupon, Plaintiff's Exhibit 3593 was
24 received into evidence.)

25 MR. GARY SHARP: And that's for notice only;

1 correct, Your Honor?

2 THE COURT: The next one is 3594, which is 27.

3 MR. MULARCZYK: So the objection to this,
4 Your Honor, it is hearsay within hearsay. It's a
5 document that purports to describe a telephone
6 conversation.

7 MR. GARY SHARP: Again, it's not a Colgate
8 document and it's never appeared in the Colgate files.

9 THE COURT: We have somebody, looks like it's
10 named Shapiro, and we have Langer. Beyond a doubt,
11 it's a hearsay document; right?

12 MR. RIVAMONTE: Your Honor, in our trial brief
13 we submitted a declaration from the custodian of
14 records from the FDA, and that declaration
15 authenticates this document, number one; and, number
16 two, confirms that this document was kept in the
17 regular course of the FDA.

18 So in that sense, Your Honor, it's admissible
19 as a business record, under the business record
20 exception. It's also --

21 THE COURT: This is a government record?

22 MR. RIVAMONTE: It is maintained as a
23 government record, yes, Your Honor. It's part of the
24 FDA files as a declaration from the FDA. It's attached
25 as an exhibit.

1 THE COURT: So it's an FDA business record.

2 MR. RIVAMONTE: Yes. It was kept in the
3 regular course of the FDA's business.

4 THE COURT: Where is the evidence that shows
5 that?

6 MR. RIVAMONTE: Let me look it up, Your Honor.

7 MR. SATTERLEY: The declaration we submitted, I
8 believe.

9 MR. RIVAMONTE: It was part of the trial brief.
10 It was in my declaration. I will give you the exact
11 exhibit number.

12 THE COURT: All right. If it's a business
13 record and it's been authenticated by a declaration.

14 MR. MULARCZYK: Well, it seems like that only
15 addresses the first layer of hearsay and not the
16 underlying telephonic conversation. The business
17 record exception is that it actually exists only
18 applies to the document itself. It doesn't apply to
19 the second layer of hearsay within the document which
20 describes the underlying telephonic conversation, which
21 is actually the title of the document itself.

22 MR. RIVAMONTE: Your Honor, just for the
23 record, it's Exhibit V as in Victor to my declaration.
24 It is a declaration of Tobin Ballinger, and in that
25 declaration, in that Exhibit B, there is an

1 authentication page by the FDA certifying that this
2 document, along with others, is part of -- maintained
3 in the regular course of the FDA's business.

4 In terms of the --

5 THE COURT: You didn't -- did you subpoena the
6 document to court and -- with the declaration by the
7 custodian?

8 MR. RIVAMONTE: It was a FOIA request done by
9 my office and when the request was made --

10 THE COURT: All right. So it's a Freedom of
11 Information Act request and they sent it back saying
12 these are the documents we have.

13 MR. RIVAMONTE: Yes, Your Honor.

14 THE COURT: That's insufficient to authenticate
15 it. If you have a declaration of a custodian as would
16 come with documents that were subpoenaed to the Court
17 for trial, that would take care of the problem in terms
18 of authentication.

19 And that they also say that it's made in the
20 regular course and scope of business with the other
21 necessary assertions, it can get past the hearsay
22 objection. But it -- but I'm going to sustain the
23 objection on this one. I don't see that having
24 occurred.

25 The next one is 3595, which is the submission

1 to the FDA.

2 MR. MULARCZYK: So, again, our objection to
3 this is authenticity.

4 THE COURT: How many pages are on this one?

5 MR. RIVAMONTE: It consists of two documents,
6 Your Honor. I think we only want -- it's kind of weird
7 because in the copy, as you'll see, there's one --
8 there's two documents per page.

9 THE COURT: Yes. I have four documents
10 altogether plus a page that does not make sense to me.
11 It says "remote user." That's right. Remote user.

12 MR. RIVAMONTE: So, Your Honor, we want the
13 McCrone document, which is dated March 12, 1976.
14 That's two pages.

15 And then we want the Johnson & Johnson --

16 THE COURT: Well. All right.

17 MR. RIVAMONTE: There's three documents total,
18 total of four pages.

19 THE COURT: There has been testimony that these
20 were the documents that were sent by the trade group,
21 the CTFA, in order to influence the FDA; isn't that
22 what the testimony was?

23 MR. MULARCZYK: I don't recall that testimony,
24 Your Honor. And I would -- one is a Johnson & Johnson
25 document. One is a McCrone document that wasn't a

1 communication with Colgate. I think we have challenges
2 to authenticity as to both. We have challenges to
3 hearsay as to both. And I believe one of the documents
4 actually discusses a -- the McCrone document also seems
5 to reference a verbal agreement that was made, so
6 there's a multiple hearsay layer issue with respect to
7 the McCrone document.

8 THE COURT: Well, my recollection of testimony,
9 and I'm blanking out at the moment as to who gave the
10 testimony, was that the trade group put together a
11 package of letters regarding the incorrect assertions
12 in the Sinai Medical School study and it was sent to
13 the FDA. But maybe I'm not correct about that.

14 MR. SATTERLEY: I think you're correct. Diana
15 Scala testified about that. And also there's testimony
16 that hadn't already been played from Mr. Hopkins on
17 that -- in that regard.

18 THE COURT: Maybe it was Mr. Hopkins'
19 testimony. I don't remember exactly whose testimony it
20 was. But that's my recollection. And if that's --
21 if -- with that testimony underpinning this, I will
22 admit it into evidence.

23 The next one is 3596, the CTFA minutes.

24 MR. MULARCZYK: Your Honor, just as a
25 clarification on the last one, which document are you

1 admitting? Or subject to the testimony, because
2 there's a few in there.

3 THE COURT: There's -- there are three letters.

4 MR. MULARCZYK: Okay.

5 THE COURT: And one of them is from Johnson &
6 Johnson, one of them is from McCrone, and one of them
7 is from Sterling Drug. And the other page that says
8 "remote user," I don't know what that means.

9 Mr. Satterley?

10 MR. MULARCZYK: It has a little note --

11 MR. SATTERLEY: We don't need that.

12 MR. MULARCZYK: I think that's a little note
13 left by the plaintiff's attorney.

14 MR. SATTERLEY: I don't, but we don't -- we
15 won't seek the admission of that, Your Honor.

16 THE COURT: All right. We're going to tear
17 that out.

18 MR. MULARCZYK: Just like that.

19 THE COURT: Just like that. All right.

20 MR. MULARCZYK: We'll -- and we'll -- we'll
21 check the -- we'll go back and check the testimony
22 that's underpinning the admission of these, and -- and
23 we'll circle back with the Court in the morning.

24 THE COURT: All right. 3596, CTFA minutes. If
25 you have no different objections, I'm going to admit

1 that.

2 MR. GARY SHARP: Your Honor, what tab? I'm
3 sorry.

4 MR. SATTERLEY: 29, Mr. Simko. Colgate was
5 present, so --

6 MR. MULARCZYK: Yeah, we'll withdraw the
7 objection.

8 THE COURT: All right. That one will be in.
9 (Whereupon, Plaintiff's Exhibit 3596 was
10 received into evidence.)

11 THE COURT: The next one as well? 3597, which
12 is 30, which -- oh, maybe I'm confusing the letters.

13 MR. GARY SHARP: Yes. I -- now -- now that I
14 see this, I -- I believe that is what happened,
15 Your Honor.

16 MR. SATTERLEY: Yeah. This is the -- this is
17 the March submission to the FDA enclosing all the
18 industry members of the CTFA, and there was
19 testimony -- specific testimony about this, about
20 Christopher Costello working for Colgate.

21 THE COURT: These are the same letters as in --
22 except there's more of them here.

23 MR. SATTERLEY: That's correct.

24 MR. MULARCZYK: Can I -- can I get back to the
25 Court on this in the morning again, just review the

1 testimony?

2 THE COURT: All right. Is there one from
3 Colgate?

4 MR. SATTERLEY: There's -- I have one --
5 there's a -- a letter and an internal -- a memo that
6 was submitted to the FDA; March 15, 1976, letter from
7 Costello to Norman Estrin, and Norman Estrin turns
8 around and submits all of this to the FDA.

9 MR. GARY SHARP: And, Your Honor, no objection
10 to those portions.

11 THE COURT: Well, the document is what the
12 document is. If you have objections to other portions,
13 we are going to deal with it, but first, let me do
14 this.

15 3595 I'm going to strike from being admitted
16 into evidence, because it's going to be duplicated
17 3597. So 3595 is out because it's a duplication.

18 3597 will be in, but the Court will reconsider
19 it if Mr. Mularczyk can find some evidence that nobody
20 talked about it.

21 (Whereupon, Plaintiff's Exhibit 3597 was
22 received into evidence.)

23 MR. MULARCZYK: I'm not -- I'm not looking for
24 a way out. I just want to confirm what the --

25 THE COURT: All right. The next one is 3599,

1 Exhibit Number 32. It's a memorandum from HEW,
2 somebody there, to Robert Schaffner.

3 MR. GARY SHARP: Yes, Your Honor. Again, this
4 is an internal FDA document that has not been
5 authenticated.

6 MR. MULARCZYK: We object on that and on
7 hearsay.

8 MR. RIVAMONTE: Your Honor, this is one of the
9 documents that the FDA produced in response our FOIA
10 request. It's Exhibit V, as in Victor, to my
11 declaration in the trial brief.

12 THE COURT: Yeah. I think it's -- I don't
13 remember what the witness, Diana Scala, said about it.
14 Do you?

15 MR. GARY SHARP: It was just read to her,
16 Your Honor.

17 THE COURT: All right. It's not in evidence.
18 Then we have 3600, which is 33.

19 MR. GARY SHARP: Yes, Your Honor. In this --
20 this next series are allegedly to be call reports
21 that -- they're Cyprus documents. They are not Colgate
22 documents. They did not appear in Colgate files.

23 THE COURT: Well, the testimony, if I recall,
24 is that the witness said that Cyprus mailed these
25 things in an offer -- in attempting to solicit business

1 from Colgate.

2 MR. GARY SHARP: No. Let me rephrase that,
3 Your Honor.

4 The testimony from Ms. Scala was -- again,
5 these were simply put in front of her, and she was --
6 they were read to her. These are -- nothing with
7 respect to Colgate or Colgate employees would verify
8 anything that's in this document from Cyprus.

9 And, again, this is a hearsay within hearsay,
10 because they purport to be conversations that took
11 place by a gentleman at Cyprus, who, apparently, was in
12 sales, and they've memorandums to his boss at the time
13 that they were attempting, apparently, to gain
14 Colgate's business, which they were not able to do
15 until they bought the company.

16 MR. SATTERLEY: Your Honor, first of all, many
17 of these documents have statements of what Colgate
18 personnel managers said. Those would be party
19 admissions, the portions of the documents. The
20 documents themselves have been authenticated --

21 THE COURT: They would be party admissions if
22 somebody was standing here to testify that "They told
23 me."

24 But what we have is a document that was written
25 a long time ago, and the witness that talked about the

1 document, if at all, doesn't say that "Somebody told
2 me."

3 MR. SATTERLEY: These --

4 THE COURT: That's a difficult problem from the
5 perspective of saying that it's a -- it's an admission.

6 MR. SATTERLEY: These documents were all
7 produced as business records by Cyprus. We have
8 testimony from the Cyprus corporate representative we
9 could tender -- tender to Your -- to Your Honor, if we
10 haven't already done so.

11 MR. RIVAMONTE: We have.

12 MR. SATTERLEY: And so these are business
13 records from 19 -- this one is from 1976, and so we can
14 authenticate these as business records, and there are
15 statements of -- of a party within the business record.

16 And it would be just -- if they had a record of
17 Ms. Schmitz --

18 THE COURT: I don't have a problem with this
19 being a business record, but I need to see the evidence
20 from Cyprus that describes it as their business record.

21 MR. SATTERLEY: We -- we provide will that to
22 Your Honor.

23 MR. RIVAMONTE: Exhibit BB to my declaration,
24 Your Honor, is the deposition testimony of Henry
25 Mulryan, who was a -- who -- who worked for Cyprus and

1 has personal knowledge about how these call reports are
2 generated in the normal course of Cyprus's business.

3 MR. SATTERLEY: He was -- the president of
4 Cyprus was deposed. And also, if Your Honor will --
5 may recall, his/he's the signator of one of the other
6 letters that --

7 THE COURT: Are you going to read that to
8 the -- read that information to the jury because this
9 guy is unavailable?

10 MR. SATTERLEY: We have designated
11 Mr. Mulryan's deposition. If the Court requires it for
12 foundation purposes, we certainly would.

13 First, I think that its authentication as a
14 business record, as a preliminary matter, the Court
15 can -- can take that and determine itself that it's a
16 business record and otherwise admissible.

17 But if the Court requires us to read that
18 portion of Mr. Mr. Mulryan's testimony, we certainly
19 can do that, if -- if need be.

20 MR. MULARCZYK: I think Your Honor is still
21 going to run into the same problem, because it's not
22 going to be Mr. Mulryan saying, "This is what Colgate
23 told me."

24 THE COURT: No, no, no. But if he identifies
25 the document as being a business record for Cyprus,

1 authenticates that, that's an exception to the hearsay
2 rule.

3 MR. MULARCZYK: But the statement is being
4 made --

5 MR. GARY SHARP: Your Honor, the statement
6 contained within this record is something the
7 plaintiffs wish to -- to show to prove the truth of the
8 matter asserted. So it is the hearsay statement within
9 the document that is the objection.

10 I -- again, I'm not going to force them to read
11 a transcript for authentication. I believe these
12 are -- probably purport to be Cyprus documents. I have
13 no reason to believe that someone has done something to
14 them.

15 It's the hearsay statements within those Cyprus
16 documents that -- that we're placing our objection,
17 because they -- it's a salesperson, who is trying to
18 get something to his boss to convince him to allow
19 making calls on Colgate that, apparently, are taking
20 hours and -- and lunches.

21 THE COURT: Well --

22 MR. GARY SHARP: They are seeking to have those
23 statements made by Colgate employees, allegedly, on a
24 third-hand basis as something to prove the truth of the
25 matter asserted.

1 MR. RIVAMONTE: Your Honor, if you look at the
2 recipient, who are -- who are -- the persons who took
3 part in this three-hour lunch in April 19, 1976 --

4 THE COURT: I -- I -- I saw that.

5 MR. RIVAMONTE: Yeah, Mr. Simko is in there.
6 So Colgate employees were --

7 THE COURT: My ruling is going to be that if we
8 can see that these are Cyprus -- genuinely business
9 records, then I will admit them into evidence.

10 If they're not, the -- the other objection that
11 it's a hearsay document or a double hearsay document is
12 one that goes to something else. I mean, hearsay
13 doesn't apply if there is an exception to the hearsay
14 rule. Hearsay within hearsay, we can give them a
15 limiting instruction, if we need to.

16 But -- so that would mean that 3600, 3601, 3603
17 are all in. And 3604 as well.

18 (Whereupon, Plaintiff's Exhibit 3600 was
19 received into evidence.)

20 (Whereupon, Plaintiff's Exhibit 3601 was
21 received into evidence.)

22 (Whereupon, Plaintiff's Exhibit 3603 was
23 received into evidence.)

24 (Whereupon, Plaintiff's Exhibit 3604 was
25 received into evidence.)

1 MR. GARY SHARP: And, Your Honor, we'll --
2 we'll draft proposed limiting instruction for the
3 Court.

4 THE COURT: I -- I have one that sort of aims
5 in this direction, and we can talk about it. Let's
6 finish this first, though.

7 MR. GARY SHARP: Thank you, Your Honor.

8 THE COURT: I also wanted to do one other
9 thing, is that counsel need not request leave of Court
10 to approach the witness every single time.

11 If you want to make the record clear, just say,
12 "I'm going to show you this document, Mr. Witness," and
13 then just --

14 MR. GARY SHARP: Thank you, Your Honor.

15 MR. SATTERLEY: We appreciate it, Your Honor.

16 MS. CLANCY: And then don't do it in a menacing
17 fashion. And then don't approach in a menacing
18 fashion.

19 THE COURT: Well, now I'm going -- I'm not
20 worried about that in this case.

21 Okay. So 3600, in; 3601, in; 3603, in; 3604,
22 that's also going to be in; 3605 -- 3611, which is
23 Number 44 --

24 MR. RIVAMONTE: It's the one with Mr. Roach.

25 THE COURT: Pardon?

1 MR. RIVAMONTE: The one you mentioned earlier
2 this morning.

3 THE COURT: Oh, no, no, no. That's -- that's
4 not spelled like me. The other one --

5 MR. RIVAMONTE: Oh, the other one.

6 THE COURT: It's 3590 --

7 MR. RIVAMONTE: Oh, okay.

8 THE COURT: -- has printing in the upper
9 right-hand corner that looks, strangely, like mine with
10 the name F. Roesch, R-o-e-s-c-h, which is how you spell
11 my name. It's an unusual spelling. It's not real
12 common. But I'm not related.

13 Okay. Let's move on.

14 MR. SATTERLEY: Colgate did have a facility in
15 Berkeley, Your Honor.

16 THE COURT: Okay. So we have the -- this
17 McCrone document with a picture on it that's --

18 MR. GARY SHARP: Which tab are we at,
19 Your Honor? Which tab?

20 THE COURT: This is 44. It's a letter directed
21 to Ms. Grace Roach of the Colgate-Palmolive Company --

22 MR. SATTERLEY: I thought we agreed --

23 THE COURT: -- July 1983.

24 MR. SATTERLEY: I thought, Mr. Sharp --

25 MR. GARY SHARP: Yeah.

1 MR. SATTERLEY: -- you -- you agreed to this
2 one; right?

3 MR. GARY SHARP: Yes.

4 THE COURT: All right. So that one will be in
5 evidence.

6 And that -- that completes that.

7 MS. CLANCY: That completes all the Scala
8 exhibits, Your Honor.

9 THE COURT: All right.

10 THE REPORTER: What -- what was Number 44 that
11 you just admitted? Was that 36- --

12 THE COURT: 3611.

13 MR. SATTERLEY: A letter from McCrone to
14 Ms. Grace Roach.

15 THE REPORTER: Okay. Thanks.

16 MS. CLANCY: Oh, Your Honor, may I just -- to
17 help the -- to assist the court reporter and the
18 Clerk -- I gave Mr. Satterley the wrong exhibit number
19 today on something. I just need to read it into the
20 record. I told him one of the exhibits that was
21 admitted was 727, but the actual exhibit number is
22 3591.

23 THE COURT: Okay.

24 MR. SATTERLEY: There was no objection at the
25 time, so I just rocked and rolled.

1 THE COURT: Mr. Bir? Mr. Bir --

2 THE CLERK: Yes?

3 THE COURT: -- we are going to admit another
4 exhibit here.

5 MS. CLANCY: It was already admitted.

6 THE COURT: Oh, it was already admitted?

7 MS. CLANCY: I just read the --

8 THE COURT: So we need to delete one.

9 MS. CLANCY: When he said, "I'm now showing you
10 727," that's because I gave him the wrong sticky.

11 THE COURT: So -- all right. So both of those
12 are in evidence. They're just different documents?

13 MS. CLANCY: No. 727 is not evidence. It's
14 3591. And I had some sort of --

15 MR. SATTERLEY: It's the same document, though.

16 MS. CLANCY: It's the same, yeah.

17 MR. SATTERLEY: It's the J4-1 method; right?

18 MS. CLANCY: Yes.

19 It's the same document. I gave him the wrong
20 document number.

21 THE COURT: Okay.

22 MS. CLANCY: So I didn't want there to be
23 any -- I've made more confusion --

24 THE COURT: Well, now, I'm easily confused.

25 Okay. I have a -- a limited -- evidence

1 admitted for limited purpose instruction that -- I'll
2 just show it to you. And if you -- if you want to --

3 MR. SATTERLEY: Can we get a copy, by chance,
4 Your Honor, or --

5 THE COURT: All right. Is there anything else
6 we need to talk about before we let the reporter go
7 home?

8 MR. SATTERLEY: The only thing is, there was
9 some evidentiary rulings Your Honor made -- evidentiary
10 rulings Your Honor made, I believe, regarding some
11 additional J&J documents, and earlier, I had requested
12 that they be received into evidence.

13 When I did that, it was at a break, and I
14 didn't hear Your Honor respond, "Okay, those are
15 received into evidence," like you did yesterday.

16 This morning you issued a ruling. It
17 was the --

18 THE COURT: What numbers are you talking about?

19 MR. SATTERLEY: These are Exhibit 4687, 0790,
20 407 --

21 THE COURT: Wait.

22 MR. SATTERLEY: And I'm reading from
23 Your Honor's order.

24 THE COURT: 4687?

25 MR. SATTERLEY: 4687, yes, Your Honor.

1 THE COURT: That's in evidence.

2 MR. SATTERLEY: Yes. The -- so -- so I guess
3 the question is, I have a list here that Your Honor
4 signed yesterday --

5 THE COURT: Well, my Clerk is on the job.

6 MR. SATTERLEY: Okay.

7 THE COURT: If I signed that order, he put them
8 into evidence.

9 MR. SATTERLEY: Okay. That's all I wanted to
10 make sure.

11 THE COURT: And I'm looking at the list of
12 documents that the Clerk has as in evidence, and 4687
13 is there.

14 MR. SATTERLEY: Okay.

15 THE COURT: So I think that if we use that as
16 an exemplar, you are going to be fine.

17 MR. SATTERLEY: I was just making sure the
18 court reporter has it reflected on the transcript.

19 THE COURT: All right.

20 MR. SATTERLEY: Thank you, Your Honor.

21 MS. STEINMANN: Your Honor, what time would you
22 like us back tomorrow?

23 THE COURT: 9:00.

24 MR. SATTERLEY: And one last thing, because
25 Dr. Longo will be going in the morning, I'm going to

1 meet and confer with defense counsel. Dr. Horn, I may
2 have to move him to either Thursday or Monday. I'll
3 send an email to counsel to let -- let them know about
4 that.

5 THE COURT: All right. We're in recess.

6 (Whereupon, Plaintiff's Exhibit 4687 was
7 received into evidence.)

8 (Whereupon, Plaintiff's Exhibit 790 was
9 received into evidence.)

10 (Whereupon, Plaintiff's Exhibit 407 was
11 received into evidence.)

12 (Whereupon, Plaintiff's Exhibit 670 was
13 received into evidence.)

14 (Whereupon, Plaintiff's Exhibit 679 was
15 received into evidence.)

16 (Whereupon, Plaintiff's Exhibit 3014 was
17 received into evidence.)

18 (Whereupon, Plaintiff's Exhibit 3088 was
19 received into evidence.)

20 (Whereupon, Plaintiff's Exhibit 5917 was
21 received into evidence.)

22 (Whereupon, Plaintiff's Exhibit 3573 was marked
23 for identification.)

24 (Whereupon, Plaintiff's Exhibit 3574 was marked
25 for identification.)

1 (Whereupon, Plaintiff's Exhibit 3577 was marked
2 for identification.)

3 (Whereupon, Plaintiff's Exhibit 3578 was marked
4 for identification.)

5 (Whereupon, Plaintiff's Exhibit 3581 was marked
6 for identification.)

7 (Whereupon, Plaintiff's Exhibit 3594 was marked
8 for identification.)

9 (Whereupon, Plaintiff's Exhibit 3595 was marked
10 for identification.)

11 (Whereupon, Plaintiff's Exhibit 3599 was marked
12 for identification.)

13

14 (Whereupon, the proceedings
15 were concluded at 5:25 p.m.)

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1 STATE OF CALIFORNIA)
2) ss.
3 COUNTY OF ALAMEDA)
4

5 I, EARLY K. LANGLEY, do hereby certify:

6 That foregoing proceedings were held in the
7 above-entitled action at the time and place therein
8 specified;

9 That said proceedings were taken before me at said
10 time and place, and was taken down in shorthand by me,
11 a Certified Shorthand Reporter of the State of
12 California, and was thereafter transcribed into
13 typewriting, and that the foregoing transcript
14 constitutes a full, true and correct report of said
15 proceedings that took place;

16 IN WITNESS WHEREOF, I have hereunder subscribed my
17 hand on April 30, 2019.

18

19

20

21

22

23

24

25

EARLY K. LANGLEY, CSR No. 3537
State of California

1 SUPERIOR COURT OF THE STATE OF CALIFORNIA
2 COUNTY OF ALAMEDA
3 BEFORE THE HONORABLE FRANK ROESCH
4 DEPARTMENT 17
5 ---000---
6 PATRICIA SCHMITZ,
7 Plaintiff,
8 vs. No. RG18923615
9 JOHNSON & JOHNSON, et
10 al.,
11 Defendants.
_____ /

12 REPORTER'S TRANSCRIPT OF PROCEEDINGS
13 (William Longo, Ph.D.)
14 Tuesday, April 30, 2019
15 Full Session
16

17
18
19 Taken before EARLY K. LANGLEY
20 RMR, RSA, B.A.
CSR No. 3537

21
22
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4 (No exhibits handled on the
5 record.)

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1 agreement about one document and we're just going to
2 put that into evidence.

3 What number is it?

4 MR. SATTERLEY: Well, Your Honor, so the record
5 is perfected, what we're moving into evidence is all
6 the Scala documents, and they have objections to
7 several of them. So.

8 THE COURT: We're only going to deal with
9 Number 3611 at this point in time.

10 MR. SATTERLEY: But the ones they didn't object
11 to, Your Honor, there's some testing documents in the
12 ones they don't object to that I would typically use.

13 THE COURT: All right.

14 MR. SATTERLEY: So if I could go ahead and seek
15 admission of all the Scala documents to which they do
16 not object and I can identify for the record those
17 numbers.

18 THE COURT: I had forgotten that there was a
19 lot of numbers. The list that I had was only the
20 contested ones.

21 MR. SATTERLEY: So there's no objection to 3571
22 which was Exhibit 4 to Scala.

23 THE COURT: Mr. Bir, are you getting these?

24 MR. GARY SHARP: No objection, Your Honor.

25 MR. SATTERLEY: There's no objection to 3572,

1 --oOo--

2 P R O C E E D I N G S

3 --oOo--

4 Tuesday, April 30, 2019 - 8:44 a.m.

5 (Morning Session)

6 (Whereupon, the following proceedings were held
7 outside the presence of the jury:)

8 THE COURT: On the record.

9 This is Schmitz v. Johnson & Johnson and
10 Colgate.

11 If I might impose on the lawyers to state your
12 names for the record.

13 MR. SATTERLEY: Good morning, Your Honor. Joe
14 Satterley for the plaintiff.

15 MS. CLANCY: Good morning, Your Honor. Denyse
16 Clancy for the plaintiff.

17 MR. CALFO: Good morning, Your Honor.
18 Alexander Calfo for the Johnson & Johnson defendants.

19 MR. BATTLE: Good morning, Your Honor. Mike
20 Battle for the Johnson & Johnson defendants.

21 MR. GARY SHARP: Good morning, Your Honor.
22 Gary Sharp and Pete Mularczyk.

23 MR. ANDREW SHARP: Good morning, Your Honor.
24 Andrew Sharp for Colgate.

25 THE COURT: All right. Counsel had an

1 which was Exhibit 5 to the Scala deposition. We'll put
2 Exhibit 6 to the side; we still need to resolve that
3 one. Put Exhibit 7 to the side; we still need to
4 resolve that one.

5 So let me just move forward to the next one
6 where there's no objection.

7 That would be Exhibit 16, which is
8 Exhibit 3583. There's no objection to 3583.

9 MR. GARY SHARP: No objection, Your Honor.

10 MR. SATTERLEY: There's no objection to 3584,
11 which is Exhibit 17 to Scala's deposition.

12 THE COURT: We'll get them all at once.

13 MR. SATTERLEY: There's no objection to 3585,
14 which is Exhibit 18.

15 THE COURT: Just give me the numbers.

16 MR. SATTERLEY: 3586.

17 3587.

18 MR. MULARCZYK: I'm sorry. Could we do it by
19 the Scala deposition number. That's how we have it
20 listed.

21 THE COURT: Mr. Satterley, you're going to have
22 to give me both numbers.

23 MR. SATTERLEY: I'll go back to Exhibit 19,
24 which was 3586.

25 Exhibit 20 is 3587.

26

1 Exhibit 24, which is 3591.
2 Exhibit 31, which is 3598.
3 Exhibit 35, which is 3602.
4 Exhibit 38, which is 3605.
5 Exhibit 39, which is 3606.
6 Exhibit 40, which is 3607.
7 Exhibit 41, which is 3608.
8 Exhibit 43, which is 3610.
9 And the one that I think counsel just indicated
10 they're going to withdraw their objection is 3611,
11 which is Scala Exhibit 44.
12 Exhibit 45 is 3612.
13 Exhibit 46 is 3613.
14 Exhibit 47 is 3614.
15 We seek the admission of each of those at
16 this -- at the time, Your Honor.
17 THE COURT: All right. As soon as Mr. Sharp
18 and Mr. Mularczyk are ready, we'll hear from them.
19 Do you stipulate all of those into evidence?
20 MR. GARY SHARP: Yes, Your Honor.
21 THE COURT: All right. Mr. Calfo.
22 MR. CALFO: Yes, Your Honor.
23 THE COURT: Have you any objection to any of
24 those exhibits?
25 MR. CALFO: No, Your Honor.

27

1 THE COURT: All right. So the record is
2 accurate, these are the exhibits that are being
3 admitted into evidence:
4 3571, 3572, 3583, 3584, 3585, 3586, 3587, 3591,
5 3598.
6 3602, 3605, 3606, 3607, 3608, 3610, 3611, 3612,
7 3613, and 3614.
8 Those are all in evidence.
9 (Whereupon, Plaintiff's Exhibit 3571 was
10 received into evidence.)
11 (Whereupon, Plaintiff's Exhibit 3572 was
12 received into evidence.)
13 (Whereupon, Plaintiff's Exhibit 3583 was
14 received into evidence.)
15 (Whereupon, Plaintiff's Exhibit 3584 was
16 received into evidence.)
17 (Whereupon, Plaintiff's Exhibit 3585 was
18 received into evidence.)
19 (Whereupon, Plaintiff's Exhibit 3586 was
20 received into evidence.)
21 (Whereupon, Plaintiff's Exhibit 3587 was
22 received into evidence.)
23 (Whereupon, Plaintiff's Exhibit 3591 was
24 received into evidence.)
25 (Whereupon, Plaintiff's Exhibit 3598 was

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1 received into evidence.)
2 (Whereupon, Plaintiff's Exhibit 3602 was
3 received into evidence.)
4 (Whereupon, Plaintiff's Exhibit 3605 was
5 received into evidence.)
6 (Whereupon, Plaintiff's Exhibit 3606 was
7 received into evidence.)
8 (Whereupon, Plaintiff's Exhibit 3607 was
9 received into evidence.)
10 (Whereupon, Plaintiff's Exhibit 3608 was
11 received into evidence.)
12 (Whereupon, Plaintiff's Exhibit 3610 was
13 received into evidence.)
14 (Whereupon, Plaintiff's Exhibit 3611 was
15 received into evidence.)
16 (Whereupon, Plaintiff's Exhibit 3612 was
17 received into evidence.)
18 (Whereupon, Plaintiff's Exhibit 3613 was
19 received into evidence.)
20 (Whereupon, Plaintiff's Exhibit 3614 was
21 received into evidence.)
22 MR. SATTERLEY: With this witness we've met and
23 conferred; we have some agreements regarding
24 admissibility of exhibits with the -- prior to
25 Dr. Longo's testimony.

29

1 THE COURT: All right. Do you want to state
2 those?
3 MR. SATTERLEY: Yes, Your Honor. These are all
4 photographs that relates to the testing of the J&J, the
5 Colgate.
6 THE COURT: Just tell me the exhibit numbers.
7 MR. SATTERLEY: Yes, Your Honor.
8 1065, 1080, 1081, 1082, 1083, and 1084, 1091,
9 1092, 1093, 1096, 1097, 1098.
10 Should be a total of 12 exhibits. I have them
11 for Your Honor in binders organized. I provided them
12 to counsel both electronically and a hardcopy. It's my
13 understanding there's no objection with the exception
14 of J&J has objections to photographs of the J&J bottle
15 that accompanies the -- each -- they don't have
16 objection for demonstrative purposes, but they don't
17 want the actual photograph of the bottle to be received
18 into evidence.
19 THE COURT: Is the photograph part of the
20 exhibit?
21 MR. SATTERLEY: Yes. It is, Your Honor.
22 THE COURT: How can I accept part of an exhibit
23 into evidence?
24 MR. SATTERLEY: I wanted to resolve that issue
25 with Your Honor, show Your Honor the exhibit.

1 THE COURT: All right.

2 MR. SATTERLEY: And I've tendered to

3 Your Honor --

4 THE COURT: Which number --

5 MR. SATTERLEY: This is 1080, Exhibit 1080, if

6 you go behind Tab Number 1. Tabs 2 through 11 there's

7 no objections to. Tab 1. Tab 1 is -- and what

8 occurred here, Your Honor, is J&J produced these

9 photographs in response to discovery under -- behind

10 Tab 1.

11 And these were the actual bottles that

12 Dr. Longo, the samples came from. And so, for example,

13 to put in context, if we could go to the fourth

14 photograph on page 4 of 1080, you'll see that J&J has

15 marked the date of the product, and so this is

16 important evidence for the jury to consider in context

17 of the sample that's being analyzed, and many of these

18 bottles have the dates on them and J&J provided those

19 dates -- provided these bottles to us exactly in this

20 fashion.

21 So it puts context on the date of the sample in

22 question. And these are the historical.

23 So like I said, all the photographs behind

24 Tabs 2 through 11, there's no objection to. That's the

25 testing -- the photographs of the actual test.

1 THE COURT: So what you're telling me is that

2 there's more than one bottle that is pictured?

3 MR. SATTERLEY: That's --

4 THE COURT: And these are the bottles that the

5 samples that Longo tested actually came in.

6 MR. SATTERLEY: Came from.

7 THE COURT: Came from.

8 MR. SATTERLEY: Because J&J's labs made the

9 sample splits and then with the chain of custody said

10 this is the sample you're getting and --

11 THE COURT: I understand. I'm just asking

12 questions here. And the writing on the -- the typed

13 writing that's taped to one bottle, for example, is

14 something that was written by Johnson & Johnson and

15 taped on to the bottle by Johnson & Johnson.

16 MR. SATTERLEY: That's the way that it was

17 produced in the course of discovery, Your Honor.

18 THE COURT: So if you ask your witness, Longo,

19 do you recognize these and he's going to say that's

20 exactly how I got them from Mr. Satterley.

21 MR. SATTERLEY: The samples were not received

22 in the bottles themselves. The samples -- J&J's own

23 lab took the samples and gave us the sample numbers.

24 You can see it says "JPBP" -- it's got a number of 188

25 or 093, and the chain of custody document matches up so

1 the dates are matched up, and he can explain that

2 through the chain of custody process.

3 But this just gives the context to the dates.

4 Counsel advised me they have no objection to

5 demonstrative for these. At the very least, I'd like

6 to demonstrate some of these, but I think they're

7 actually -- should come into evidence so the jury can

8 evaluate the dates of the various samples as

9 represented by J&J.

10 THE COURT: All right.

11 Ms. Steinmann, you're standing there.

12 MS. STEINMANN: Your Honor.

13 THE COURT: I presume that you're going to tell

14 me what the objection is.

15 MS. STEINMANN: The objection is just that

16 these aren't evidence of anything in this case.

17 Dr. Longo is going to be able to tell the jury what the

18 dates were and there is no reason to put in 99 photos

19 of different Johnson & Johnson bottles. It's not

20 evidence of anything. Demonstrative-wise I agree --

21 THE COURT: That's not an evidentiary

22 objection. Maybe it's a -- maybe the argument is 352

23 cumulative. But the concept that they don't need to is

24 not --

25 MS. STEINMANN: Sorry, Your Honor. Formal

1 objection --

2 THE COURT: They have to -- they get to put on

3 their case.

4 MS. STEINMANN: Formal objection is 352. I was

5 just explaining the reasons for our objection, which is

6 I believe these are fair for a demonstrative, but I

7 don't think they have any relevance to go back to the

8 jury. And she didn't use those bottles, and we just

9 don't want the jury to get the misimpression that all

10 of these bottles came from Mrs. Koretoff --

11 Mrs. Schmitz, I'm sorry.

12 THE COURT: Okay. If that's the objection,

13 it's overruled.

14 MS. STEINMANN: Thank you, Your Honor.

15 THE COURT: So what number is that exhibit?

16 MR. SATTERLEY: That's 1080.

17 THE COURT: All right. The following

18 exhibits -- other than that one, do you stipulate that

19 all the rest of the list that was read by Mr. Satterley

20 may be admitted into evidence?

21 MS. STEINMANN: Your Honor, I believe I was

22 walking in, but if it's what he said to me --

23 THE COURT: I'll read it to you, if you'd like.

24 MS. STEINMANN: Okay.

25 Is this it?

34

1 MR. SATTERLEY: I provided hardcopies to -- to
2 all counsel. These are the J&J's and Colgate is right
3 there.
4 MS. STEINMANN: Just give me one second to get
5 through them.
6 THE COURT: Of course.
7 MS. STEINMANN: Yes, Your Honor. This appears
8 to be what was sent to us and we did stipulate to
9 these.
10 THE COURT: All right. Mr. Sharp, have you any
11 objection to any of these exhibits?
12 MR. GARY SHARP: No, Your Honor.
13 MR. MULARCZYK: Your Honor, I just have one
14 objection. I'm sorry. Are we talking about the
15 Johnson & Johnson ones or the ones pertaining to
16 Colgate?
17 THE COURT: Yes. We're talking about the 1065
18 through 1098 list that was read into the record by
19 Mr. Satterley.
20 MR. MULARCZYK: So the only objection that I
21 have -- I'm okay with all the photographs. The one
22 objection I have is a document here. It's a chain of
23 custody document. It's 1096. And my objection is that
24 this contains a list of samples that aren't at issue in
25 this case and that Dr. Longo is not relying on.

35

1 So.
2 MR. SATTERLEY: Are you talking about this list
3 right here?
4 MR. MULARCZYK: Correct.
5 THE COURT: What number?
6 MR. MULARCZYK: There's a whole host of samples
7 that are not subject to this case at all in this list.
8 This is 1096.
9 THE COURT: I understand, but in this binder
10 what tab is it?
11 MR. SATTERLEY: Your Honor, you don't have the
12 correct binder right there. 1096. If I could tender
13 it to the Court. It's in the second box.
14 This is the first I'm hearing of this
15 objection, but I can agree if they don't cross-examine
16 on -- that he didn't test these other 43 bottles -- or
17 41 bottles, I will agree to redact that and only put
18 the ones -- the bottles that he did test. What
19 occurred -- well -- and that's my offer is, as long as
20 they don't cross-examine on those other bottles that
21 were not tested, I have no problem redacting this
22 document and making it only the bottles that were
23 tested.
24 THE COURT: All right. So we'll redact the
25 bottles that weren't tested.

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1 MR. SATTERLEY: Yes.
2 THE COURT: That sounds like a perfectly good
3 way of approaching the problem.
4 MR. SATTERLEY: Yes, Your Honor.
5 MR. MULARCZYK: Thank you, Your Honor.
6 THE COURT: Okay. So, for the record, the
7 following exhibits are admitted into evidence:
8 1065, 1080, 1081, 1082, 1083, 1084, 1091, 1092,
9 1093, 1097, 1098.
10 (Whereupon, Plaintiff's Exhibit 1065 was
11 received into evidence.)
12 (Whereupon, Plaintiff's Exhibit 1080 was
13 received into evidence.)
14 (Whereupon, Plaintiff's Exhibit 1081 was
15 received into evidence.)
16 (Whereupon, Plaintiff's Exhibit 1082 was
17 received into evidence.)
18 (Whereupon, Plaintiff's Exhibit 1083 was
19 received into evidence.)
20 (Whereupon, Plaintiff's Exhibit 1084 was
21 received into evidence.)
22 (Whereupon, Plaintiff's Exhibit 1091 was
23 received into evidence.)
24 (Whereupon, Plaintiff's Exhibit 1092 was
25 received into evidence.)

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1 (Whereupon, Plaintiff's Exhibit 1093 was
2 received into evidence.)
3 (Whereupon, Plaintiff's Exhibit 1097 was
4 received into evidence.)
5 (Whereupon, Plaintiff's Exhibit 1098 was
6 received into evidence.)
7 (Whereupon, Plaintiff's Exhibit 1096 was marked
8 for identification and provisionally admitted
9 after redaction.)
10 THE COURT: 1096 is provisionally admitted, but
11 the actual document will be redacted after testimony of
12 the witness who will itemize the ones that he actually
13 tested.
14 That means that you can't show that one on the
15 screen.
16 MR. SATTERLEY: Yes, Your Honor. We have three
17 additional stipulations with regards to demonstrative
18 evidence. And this is Exhibits 1046, 1047, and 1099.
19 1046 is a NIST standard, and I don't believe
20 there's any objection --
21 For demonstrative purposes only; correct?
22 MR. CALFO: Correct.
23 THE COURT: All right. So 1046 won't be
24 admitted into evidence, but you may show it on the
25 screen.

1 (Whereupon, Plaintiff's Exhibit 1046 was marked
2 for identification.)
3 MR. SATTERLEY: Yes, Your Honor.
4 MR. MULARCZYK: Well, we have an objection to
5 that one specifically for all purposes. I didn't have
6 an objection to the animation that he proposed, but I
7 did have an objection to that for all purposes. It
8 wasn't something that was disclosed in this case, it
9 wasn't something that was referenced as reliance
10 material in his deposition, and so for that reason it
11 shouldn't be permitted in this case.
12 THE COURT: All right. So it's a demonstrative
13 tool.
14 MR. SATTERLEY: Yes, just demonstrative,
15 Your Honor. We're not seeking its admission.
16 THE COURT: All right. What is it?
17 MR. SATTERLEY: It's just -- it's a tremolite.
18 The NIST -- NIST is the National Institute for
19 Standards and Technology, and this shows what tremolite
20 the standard is.
21 THE COURT: Is that the image that you're
22 showing me there that I can see from here?
23 MR. SATTERLEY: Pardon?
24 THE COURT: No, no. I can see it from here.
25 Oh, it's not just one page.

1 MR. SATTERLEY: It is, I think, three pages and
2 it shows what under the microscope the standard of
3 tremolite is, and all Dr. Longo does is says -- gives
4 an opinion that he has -- that he's -- his lab took
5 these photographs.
6 THE COURT: All right. I'll allow it as a
7 demonstrative. I won't allow it into evidence.
8 MR. SATTERLEY: And the heavy liquid separation
9 animation is 1046 is what I showed in opening
10 statement. Counsel advised me they have no objection
11 to it for demonstrative purposes only the animation of
12 the heavy liquid separation, as 1047.
13 THE COURT: All right. That can be shown on
14 the monitor, but it won't be in evidence.
15 MR. SATTERLEY: Yes, Your Honor. And the final
16 is the 1990 advertisement in a magazine called *Asbestos*
17 *Issues*, June of 1990. And this is Exhibit 1099. And
18 it's --
19 No objection for demonstrative purposes?
20 MR. CALFO: No objection for demonstrative
21 purposes.
22 THE COURT: Mr. Mularczyk?
23 MR. SATTERLEY: The 1990 ad.
24 THE COURT: All right. Mr. Mularczyk is
25 shaking his head no.

1 MR. MULARCZYK: No objection, Your Honor, I'm
2 sorry.
3 THE COURT: All right, so that one also can be
4 shown to the jury, but it's not in evidence.
5 (Whereupon, Plaintiff's Exhibit 1047 was marked
6 for identification.)
7 (Whereupon, Plaintiff's Exhibit 1099 was marked
8 for identification.)
9 MR. SATTERLEY: While I'm meeting and
10 conferring with Mr. Calfo, Ms. Clancy has a few issues
11 that she may want to raise.
12 MS. CLANCY: Ms. Steinmann.
13 MS. STEINMANN: I'm sorry, but, Your Honor, we
14 were sent a grouping of exhibits early this morning,
15 and they also just were nice enough to provide me a
16 copy, but I'm still going through them as we've been
17 talking, so I'm not prepared to address these yet.
18 We've just got them this morning, so.
19 MS. CLANCY: These were all documents to which
20 Johnson & Johnson responded to an RFA saying that they
21 kept them in the ordinary course of business, and so at
22 the time they were created, I didn't anticipate there
23 would be, well, actually an objection to them. So if
24 we could just take two minutes to allow Ms. Steinmann
25 to look at the documents.

1 THE COURT: Are you going to be using them with
2 this witness?
3 MS. CLANCY: Yes, Your Honor.
4 THE COURT: All right. Well, let's take a
5 minute and take a look at it. We'll take a short
6 recess.
7 MS. CLANCY: Thank you, Your Honor.
8 MR. MULARCZYK: When this issue is resolved, I
9 don't know if the Court remembers, but we still had a
10 motion in limine on this witness, and -- with the full
11 expectation that this Court is not going to turn around
12 this witness and send him home, I just would ask for a
13 few minutes so we can address it and we just have a
14 ruling on it before we move forward.
15 THE COURT: All right.
16 While Ms. Steinmann is looking at all those
17 documents, we are going to Amotion in limine. It is
18 Motion in Limine -- Joint Motion in Limine Number --
19 I've forgotten the numbers -- like, 7 or 8, or
20 something. It's Number 1 --
21 MR. MULARCZYK: It's 3A.
22 THE COURT: Well -- oh, it's -- oh --
23 MR. MULARCZYK: It's -- it's Colgate's Motion
24 in Limine 3A.
25 THE COURT: Yes, there you go. It was also

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1 Whitaker, Clark & Daniels' motion.
 2 And by the way, I -- I want to point out to you
 3 that on Exhibit 23 to the Scala deposition, where it
 4 says "F. Roesch, R-o-e-s-c-h, at the top in what
 5 appears to be maybe even my handwriting, that's not my
 6 handwriting. And I am no relation to Fred Roesch.
 7 MR. GARY SHARP: It is spelled differently.
 8 THE COURT: No, it's not.
 9 MR. GARY SHARP: I thought it was R-o-a-c-h.
 10 Exhibit 23, Your Honor?
 11 THE COURT: Yes.
 12 MR. SATTERLEY: As I was reading through the
 13 document the other day, I was thinking, "I wonder if
 14 he's related."
 15 THE COURT: All right. I have this motion
 16 actually as Motion in Limine Number 2 of
 17 Colgate-Palmolive.
 18 MR. MULARCZYK: Oh, okay. All right.
 19 MS. CLANCY: Isn't that the one he already
 20 ruled on, Number 2?
 21 MR. MULARCZYK: We never argued this one.
 22 MS. CLANCY: We argued one motion in limine for
 23 you on Dr. Longo on -- on chain of custody.
 24 MR. MULARCZYK: So there was one on samples,
 25 and there was on Longo. Two separate motions.

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1 MS. CLANCY: Correct.
 2 I think -- I think, Your Honor, where -- I'm a
 3 little confused, because we argued one on the
 4 authenticity of the samples, and then they filed
 5 another motion also alleging authenticity of the
 6 samples and -- and other of what -- Dr. Longo's
 7 opinions. I just want to make sure I'm responding to
 8 the correct one, because the Court has already ruled on
 9 the one with regard to authenticity of the samples.
 10 THE COURT: This is -- it's -- it's this motion
 11 right here, this --
 12 MS. CLANCY: What is -- what is the --
 13 THE COURT: I would say that's nine inches of
 14 Colgate --
 15 MS. CLANCY: The 9-inch motion? Well,
 16 unfortunately, that doesn't differentiate it from other
 17 any of Colgate's other motions, so --
 18 THE COURT: This is -- this is the biggest one.
 19 MS. CLANCY: Oh, the biggest one. What's the
 20 title of it?
 21 THE COURT: Plaintiffs' -- it is Defendant
 22 Colgate-Palmolive Company's Motion in Limine to Exclude
 23 Testimony of Plaintiff's Expert Dr. William Longo
 24 Regarding Unreliable Testing Performed on Undisclosed,
 25 Unauthenticated Containers of Cashmere Bouquet.

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1 MS. CLANCY: I think that's the one that the
 2 Court has already ruled on, but --
 3 THE COURT: My note shows that it's passed.
 4 MS. CLANCY: Okay. All right. Well --
 5 THE COURT: You may be confusing it with the
 6 Egilman motion.
 7 MR. MULARCZYK: Your Honor, there was one about
 8 the authenticity of the samples themselves.
 9 THE COURT: That was --
 10 MR. MULARCZYK: It was Joint -- it was Joint
 11 Defense, I think, Motion in Limine Number 1, maybe, or
 12 Colgate Number 1.
 13 THE COURT: All right. Well, go ahead,
 14 Mr. Mularczyk.
 15 MR. MULARCZYK: All right. So since -- since
 16 this motion is fresh in your mind, Your Honor --
 17 THE COURT: I must confess that while I read
 18 the motion, I didn't look at all the exhibits.
 19 MR. MULARCZYK: And I don't blame you.
 20 So this is -- this is a really focused motion.
 21 Generally speaking, I don't have a concern with
 22 Dr. Longo speaking about the testing that he personally
 23 did, but where it becomes problematic is when he
 24 attempts to extrapolate from his own handful -- subset
 25 of testing that he's done to try to say whether or not

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1 what the plaintiff used was contaminated and at what
 2 levels specifically.
 3 There is an opinion that he has specifically
 4 within his -- within his declaration and that he
 5 offered in his deposition, which is, basically, anybody
 6 including Ms. Schmitz, who used Cashmere Bouquet at any
 7 time would have been exposed to asbestos and at
 8 significant levels or substantial levels.
 9 And so, again, I've got no problem with him
 10 coming in here and talking about the samples he's
 11 tested. It's well within -- well within his realm.
 12 But there is nothing that he has done
 13 scientifically, whether it's some sort of analysis or
 14 calculation, whether it be mathematical or statistical
 15 or anything at all, that allows him to make the jump
 16 from the small subset of samples that he has tested to
 17 the -- to the entire product line or even to the
 18 products that Ms. Schmitz used. There's simply nothing
 19 there. Nothing at all.
 20 And I think it's inappropriate to allow him to
 21 do that under *Sargon*. I don't think he's demonstrated
 22 that. And so if we're going to keep him to -- if we
 23 are going to keep him in his lane and have him talk
 24 about his samples that he has looked at personally, no
 25 problem. But as soon as he makes that jump to what

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1 Ms. Schmitz used and whether that's appropriate, I
2 think it's not, and I don't think it's supported.
3 THE COURT: All right. Does Johnson &
4 Johnson --
5 MR. CALFO: We join.
6 THE COURT: You concur with that?
7 MR. CALFO: Yes, Your Honor.
8 THE COURT: All right.
9 Ms. Clancy.
10 MS. CLANCY: Okay. Yes, Your Honor. So within
11 the nine inches of exhibits that Colgate attached, I'm
12 assuming that they attached Dr. Longo's report in this
13 case, where they stated that there were no scientific
14 calculations, no data, no math whatsoever to support
15 his opinions, and that's absolutely belied by his
16 report.
17 He's testified in his deposition -- and he
18 provided voluminous testing -- that not only has he
19 examined the actual samples of Cashmere Bouquet and
20 Johnson & Johnson --
21 THE COURT: Well, they're -- they're not saying
22 that. They're saying that he's incapable of opining
23 that because he found asbestos in the samples that he
24 looked at of the Colgate-Palmolive product, that --
25 that other bottles may have had asbestos in them, too.

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1 MS. CLANCY: Yeah, sure. So he found in the
2 Colgate bottles, 100 percent contained asbestos.
3 THE COURT: 100 percent of the samples, not --
4 MS. CLANCY: Correct.
5 THE COURT: -- 100 percent of the bottles.
6 MS. CLANCY: And he also found -- went through
7 the Colgate historical documents, where Colgate found
8 asbestos in their samples.
9 He's also reviewed the mechanism of testing
10 that Colgate used in order to analyze whether or not it
11 had asbestos, which, as the Court heard yesterday and
12 as we heard from Scala, is the XRD method, which is
13 incapable of being sensitive to asbestos below a
14 certain level. 2 percent to 1 percent is the
15 scientific evidence.
16 And so, therefore, under *Lyons v. Colgate*, the
17 Court of Appeals expressly held that where you have an
18 expert who analyze d the sample at issue, who has
19 looked at the historical document, who has looked at
20 the testing samples, the testing that was used by the
21 corporation, to see that it was wholly deficient to
22 find whether there was asbestos there in the first
23 instance, that it is absolutely permissible for that
24 expert to say whether or not when the plaintiff
25 breathed -- that the plaintiff would have had

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1 substantial exposure to asbestos by use of the product.
2 And that *Colgate v. Lyons* decision was
3 expressly found, especially in a situation where the
4 plaintiff had a lifetime use or it was for decades of
5 use of a product, that for the expert to say that it
6 would have been a substantial exposure upon use of the
7 product was permissible testimony.
8 Anything with respect to, "Well, you can't say,
9 because you didn't test her actual bottle that she
10 used," or "You can't say that literally every bottle
11 had asbestos in it because you couldn't test every
12 single bottle," that goes, the Court held -- went to
13 the weight and not the admissibility of that opinion.
14 The -- Dr. Longo in his report set forth the
15 careful calculations, where he analyzed each of
16 Ms. Schmitz' personal use exposures from each of the
17 products, calculating the number of grams in the
18 products, the amount of ounces used in her lifetime,
19 and the -- the resultant exposure that would have
20 ensued as a result of her use of the products.
21 This is square on with what the Court of
22 Appeals has held is admissible based on, actually,
23 Defendant Colgate's same objections in that case.
24 THE COURT: Mr. Mularczyk.
25 MR. MULARCZYK: So I guess I'll have to live

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1 with the Lyons decision forever, but that was a summary
2 judgment case, okay, has no applicability to the issue
3 that we're raising here.
4 Let's make sure we understand what his
5 expertise is. He's a material scientist. He's an
6 analyst. He tests the products that are before him, or
7 his lab tests the products that they're looking at.
8 He's -- he's not an individual that has anything in his
9 background that allows him to make this statistical
10 leap about what Ms. Schmitz may have used and how often
11 and so forth.
12 He, himself, testified at his deposition that
13 the reason he gets from his subset of 58 samples to
14 what Ms. Schmitz used was because he took the number of
15 positives, divided it by the total number of samples he
16 tested, and says, "Well, that's the percentage. I'm
17 going to be a little bit conservative, because there's
18 some nondetects" -- and he tested some samples where he
19 found nothing, by the way -- and then he says, "I'm
20 going to take that percentage and apply it to the
21 universe of products."
22 That's -- that's not expertise, Your Honor. I
23 could do that for anything.
24 THE COURT: Well, you can -- it goes to the
25 weight, though. It goes not to admissibility.

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1 The motion is denied.
2 All right. Are we ready to proceed?
3 MS. CLANCY: I just was going to find out
4 which --
5 THE COURT: Still on the record.
6 Ms. Steinmann is going to give us the word as
7 soon as she's ready.
8 Ms. Steinmann, how much more time do you need?
9 MS. STEINMANN: I -- I think I'm ready.
10 THE COURT: All right. I don't want to press
11 you. If you need a few more minutes, that would be
12 fine.
13 MS. STEINMANN: I'm done.
14 THE COURT: All right.
15 MS. CLANCY: Can I just look at which ones
16 you've --
17 MS. STEINMANN: Yes.
18 MS. CLANCY: May I meet and confer with her for
19 one minute, Your Honor?
20 THE COURT: Yes.
21 MS. CLANCY: Thank you.
22 (Counsel conferring at counsel table out of the
23 hearing of the reporter.)
24 MS. CLANCY: Your Honor, we have a stack of
25 agreed. If I could read into the record and then we

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1 have a very small stack of disagreed.
2 THE COURT: All right.
3 MS. CLANCY: Agreed exhibits which plaintiffs
4 offer into evidence are Plaintiff's 640, 158, 155, 171,
5 174, 430, 660, 713, 752, and 172.
6 THE COURT: Ms. Steinmann, do you stipulate
7 those documents into evidence?
8 MS. STEINMANN: Yes, Your Honor.
9 THE COURT: Mr. Sharp? Mr. Mularczyk?
10 MR. MULARCZYK: Just subject to the same
11 objection regarding the applicability -- well, hearsay
12 as to Colgate and then the instruction that we
13 requested.
14 THE COURT: All right. Well, the hearsay as to
15 Colgate, which one? I mean, you know.
16 MR. MULARCZYK: My understanding is these are
17 all Johnson & Johnson documents, so all of them as
18 against Colgate.
19 THE COURT: Oh, all right. Well, it's just the
20 issue about that the jury can't take evidence of
21 malfeasance by Johnson & Johnson and attribute it to
22 Colgate?
23 MR. MULARCZYK: Correct.
24 THE COURT: Okay. You will get an instruction
25 on that. You'll just have to continue working it out.

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1 MR. CALFO: Your Honor, we're both getting an
2 instruction; right?
3 THE COURT: Oh, yeah, yeah, yeah. It goes both
4 ways. It actually will be one -- it's all in one
5 instruction more likely than not.
6 All right. All of those exhibits are in
7 evidence. I'll read them for the record:
8 640, 158, 155, 171, 174, 430, 660, 713, 752,
9 and 172.
10 (Whereupon, Plaintiff's Exhibit 640 was
11 received into evidence.)
12 (Whereupon, Plaintiff's Exhibit 158 was
13 received into evidence.)
14 (Whereupon, Plaintiff's Exhibit 155 was
15 received into evidence.)
16 (Whereupon, Plaintiff's Exhibit 171 was
17 received into evidence.)
18 (Whereupon, Plaintiff's Exhibit 174 was
19 received into evidence.)
20 (Whereupon, Plaintiff's Exhibit 430 was
21 received into evidence.)
22 (Whereupon, Plaintiff's Exhibit 660 was
23 received into evidence.)
24 (Whereupon, Plaintiff's Exhibit 713 was
25 received into evidence.)

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1 (Whereupon, Plaintiff's Exhibit 752 was
2 received into evidence.)
3 (Whereupon, Plaintiff's Exhibit 172 was
4 received into evidence.)
5 What documents are you offering that you do not
6 have agreement on?
7 MS. CLANCY: Sure. Should I -- there's just a
8 few, so should I take them one at a time -- and I want
9 to give an overarching change so there's one thing on
10 the table. For each of these, we're offering Johnson &
11 Johnson has responded to request for admission, in this
12 case stating that they -- the true and correct copy of
13 these -- these are true and correct copies and that
14 they were maintained in the ordinary course of business
15 of Johnson & Johnson.
16 THE COURT: So it's an admission that they're
17 business records?
18 MR. SATTERLEY: That's correct.
19 MS. CLANCY: So the -- then we'll get -- they
20 have objections on top of that.
21 So the first one is Document 724.
22 MR. SATTERLEY: I can address 724, Your Honor.
23 Their objection, I understand, is that this document
24 relates to industrial talc instead of cosmetic.
25 THE COURT: What is it?

1 MR. SATTERLEY: It's a McCrone letter to them
2 talking about the presence of amphiboles and asbestos,
3 fibers of asbestos in talc, in Vermont -- in the
4 Vermont mines where they were making baby powder with
5 this talc.

6 And they say this relates to industrial talc,
7 not cosmetic talc. But the testimony of Dr. Hopkins,
8 who the jury will hear, Your Honor has already ruled,
9 he says, and the other documents show, HC, the word
10 "HC" stands for Hammondsville cosmetic, and "HC" are --
11 is on the sample number on here quite a bit.

12 Your Honor has already overruled the general motion in
13 limine with regards to industrial talc or any reference
14 to industrial talc.

15 This, I think, falls squarely within that.
16 But, more importantly, it's going to be for the jury to
17 assess whether or not it's cosmetic talc like we claim
18 and like Dr. Hopkins admits through the documents that
19 HC stands for Hammondsville cosmetic or whether it's
20 industrial talc which that's their argument.

21 THE COURT: All right.

22 MS. STEINMANN: Your Honor, with respect to
23 that document, yes, we do dispute that HC, and
24 Dr. Hopkins also disputes it, that it is cosmetic talc.
25 He says it can be designated for industrial talc

1 including a specific document that says roofing
2 materials.

3 So we believe that that particular document
4 under 352 and relevance is not relevant to this case
5 and is also misleading and also requires us to have a
6 little minitrial of what HC actually means and what it
7 doesn't mean.

8 THE COURT: All right. I'll admit the document
9 into evidence. The objection is overruled.

10 Next one?

11 MS. CLANCY: That was 724.

12 THE COURT: 724 will be in evidence.

13 (Whereupon, Plaintiff's Exhibit 724 was
14 received into evidence.)

15 MS. CLANCY: The next one is 719.

16 MR. SATTERLEY: 719 is a letter from McCrone
17 once again to Windsor Minerals and it's signed by
18 Thomas Kremer and James Millette, and it's related to
19 1986. It's identification of chrysotile asbestos in
20 talc. We believe this is relevant to demonstrate that
21 chrysotile asbestos was actually found in the talc
22 samples. And there's been a lot of discussion about
23 McCrone and Dr. Millette, and there will be further
24 discussion about Thomas Kremer. And so we believe this
25 is relevant and important for the jury to understand

1 the identification of chrysotile as found in these
2 samples.

3 MS. STEINMANN: Your Honor, our response to
4 this is -- and I believe there's no dispute; there may
5 be, but -- this is specifically dealing with a mine in
6 California that cosmetic talc was never ever mined out
7 of, not for J&J or for any other company.

8 THE COURT: I think this was the Windsor mines?

9 MR. SATTERLEY: Windsor Minerals is not
10 California. Windsor Minerals is Vermont. It's Windsor
11 Minerals.

12 MS. STEINMANN: These testing results, as
13 Dr. Hopkins explains, are from a California western
14 mine.

15 THE COURT: Did Windsor mines have mines
16 outside of Vermont?

17 MS. STEINMANN: Johnson & Johnson only got
18 their talc from Vermont. I can't speak for Windsor
19 mines.

20 THE COURT: Okay. Well, you got to persuade me
21 that Windsor doesn't refer to the mines called Windsor
22 mines in Vermont before I can even really seriously
23 consider your objection.

24 MS. STEINMANN: Nowhere in here does it say
25 Windsor mines. It says "WMI," which is a designation

1 as Hopkins explains, which stands for this western mine
2 in California.

3 MR. SATTERLEY: Well, Hopkins, Your Honor, has
4 no basis whatsoever to explain away the document. The
5 document says Windsor Minerals. There's no Windsor
6 Mineral California talc mines that I've ever heard of.
7 So if that's their argument, that's an argument they
8 can make to the jury that that's not relating to this,
9 but there's certainly no documents to support that
10 argument.

11 THE COURT: All right. It seems that the
12 parties have different visions of what it actually
13 stands for. We'll let the jury decide it. 719 will be
14 in evidence.

15 (Whereupon, Plaintiff's Exhibit 719 was
16 received into evidence.)

17 MR. SATTERLEY: The next document is 726,
18 Your Honor. This is 2004 testing of Johnson & Johnson
19 Baby Powder by Forensic Analytical.

20 This was received by Johnson & Johnson at the
21 time. Forensic Analytical in Hayward, California
22 tested off-the-shelf baby powder, found asbestos in it,
23 anthophyllite asbestos. It was immediately -- this
24 report was transferred.

25 THE COURT: What's the objection?

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1 MS. STEINMANN: Your Honor, this was testing
 2 done by a new station. It was not done by the request
 3 or at the request of Johnson & Johnson, and we believe
 4 it has hearsay and is irrelevant.
 5 THE COURT: Well, it's not a business record?
 6 MS. STEINMANN: It is -- it was in our files.
 7 It was sent to us.
 8 MR. SATTERLEY: Your Honor, at the very least,
 9 this goes to notice. We're going to hear who Mark
 10 Floyd is today.
 11 THE COURT: It only goes to notice. 726 will
 12 be in evidence.
 13 (Whereupon, Plaintiff's Exhibit 726 was
 14 received into evidence.)
 15 MR. SATTERLEY: Your Honor, Exhibit 163 is a
 16 1971 document regarding their meeting with Dr. Langer
 17 concerning analytical analysis of talc, and this shows
 18 that -- this gives them knowledge that with regard to
 19 fibrous minerals in 1971 were identified. It goes to
 20 the fibrous content. It goes to asbestos, their
 21 knowledge of asbestos in the product. In this 1971
 22 document in their files it says Johnson's product he
 23 estimated 5 percent, and the other 25 percent of the
 24 particles to be fibrotic, some of which could be
 25 asbestos.

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1 I believe their objection is that it relates to
 2 ovarian tissue, but at no point in this document do
 3 they talk about ovarian cancer. They just talk about
 4 the findings of talc and asbestos in ovarian tissue.
 5 MS. CLANCY: Uterine tissue.
 6 MR. SATTERLEY: Uterine tissue.
 7 THE COURT: Ms. Steinmann.
 8 MS. STEINMANN: Your Honor, a couple of things.
 9 The document itself actually says "uterine tissue" on
 10 the very first page. And this is, again, dealing with
 11 the Tenovus study, which was solely directed at
 12 studying uterine tissue for the development of ovarian
 13 cancer and whether it was or was not caused by talcum
 14 powder. That was the subject of an MIL, and we believe
 15 that this document is irrelevant and misleading under
 16 352.
 17 THE COURT: Can I see the document?
 18 MR. SATTERLEY: Yes, Your Honor. While I'm
 19 handing the document to the Court, while Your Honor did
 20 say ovarian cancer should not be discussed, this
 21 document never talks about ovarian cancer.
 22 THE COURT: Just let me read it. 163 will be
 23 in evidence.
 24 (Whereupon, Plaintiff's Exhibit 163 was
 25 received into evidence.)

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1 MR. SATTERLEY: The final -- the final
 2 document --
 3 MS. STEINMANN: Your Honor, if I could, if it
 4 is coming into evidence, could we just ask -- ask that
 5 the word "uterus" be redacted.
 6 THE COURT: Oh, I don't think that that's so
 7 prejudicial.
 8 MR. SATTERLEY: And the final document,
 9 Your Honor, relates to documents already been displayed
 10 to the jury in the cross-examination of Alice Blount.
 11 This is a 1998 letter from Alice Blount to the attorney
 12 for Johnson & Johnson. It was authenticated by
 13 Dr. Blount, and --
 14 THE COURT: What number is it?
 15 MR. SATTERLEY: This is Exhibit 160, and this
 16 is April 23, 1998, where she identifies the --
 17 THE COURT: I remember.
 18 MR. SATTERLEY: -- sample.
 19 THE COURT: I remember the testimony.
 20 What's the objection to that?
 21 MS. STEINMANN: Your Honor, foundation and
 22 hearsay.
 23 THE COURT: Oh, she looked at the letter and
 24 said, I sent this to their lawyer. That will be
 25 admitted into evidence. That's Number 160.

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1 (Whereupon, Plaintiff's Exhibit 160 was
 2 received into evidence.)
 3 MS. STEINMANN: Your Honor, I also just want to
 4 make sure, I believe that that had been sent with the
 5 Blount records, so I want to make sure that there's not
 6 duplicate copies being submitted. I didn't have a
 7 chance to cross-reference --
 8 MR. SATTERLEY: We won't put two copies of the
 9 same things in evidence. We still have to address the
 10 Blount documents later.
 11 With that, Your Honor, we're prepared for the
 12 jury to come in.
 13 THE COURT: All right. Is there anything you
 14 would like to raise, Mr. Calfo?
 15 MR. CALFO: Nothing, Your Honor.
 16 THE COURT: Nobody else is standing up. Let's
 17 bring the jury in.
 18 (Whereupon, the jury having entered the
 19 courtroom, the following proceedings were held:)
 20 THE COURT: Good morning, ladies and gentlemen.
 21 THE JURY: Good morning.
 22 THE COURT: Sorry to keep you waiting so long.
 23 The record should reflect that all the jurors are in
 24 their appropriate seats, counsel are present, and we're
 25 ready to proceed.

1 We are not going back to the video. You're
2 going to see a witness this morning.
3 Would you please call your next witness,
4 Mr. Satterley.
5 MR. SATTERLEY: Yes. Good morning, Your Honor.
6 Good morning, ladies and gentlemen.
7 Dr. William Longo.
8 WILLIAM LONGO, Ph.D. (for the Plaintiff)
9 sworn as a witness,
10 testified as follows:
11 THE CLERK: Thank you, sir. Please take a
12 seat.
13 Could you please state your full name and spell
14 it for the record.
15 THE WITNESS: William Edward Longo, L-o-n-g-o.
16 THE COURT: Mr. Satterley, you may inquire on
17 direct examination.
18 MR. SATTERLEY: Thank you.
19 DIRECT EXAMINATION BY MR. SATTERLEY:
20 Q. Good morning, Dr. Longo.
21 A. Good morning.
22 Q. Have we requested you to come talk with the
23 folks here in Alameda County regarding your testing of
24 various talc products for the presence of asbestos?
25 A. Yes, sir, you did.

1 Q. And have we -- have you brought with you
2 photographic evidence of the testing and testing
3 results of what you found?
4 A. Yes, I did.
5 Q. Have I also asked you to analyze the case of
6 Patricia Schmitz with regards to her exposures, the
7 types of exposures she would have, to asbestos from
8 cosmetic talc products?
9 A. Yes. That's correct.
10 Q. Before we get to your specific opinions in this
11 case, let's talk a little bit about you and yourself.
12 Tell us, where did you go to college, college
13 forward as far as your education.
14 A. I went to the University of Florida. I
15 received a bachelor's of science in microbiology. I
16 went on to graduate school in material science and
17 engineering. I received a master's of science in
18 material science and engineering, and finished up in
19 1983 with a Ph.D. in material science and engineering.
20 All at the University of Florida.
21 Q. So when I call you "doctor," you're not a
22 medical doctor?
23 A. No, sir, I'm not.
24 Q. Tell us about material science. What is that?
25 A. It's an engineering field that literally is the

1 study of materials, and you can break these materials
2 down to approximately five groups.
3 Plastics or polymers, ceramics or minerals like
4 asbestos, metals, or metallurgy. And then composites
5 where you may have a polymer that has a metal content
6 of it where they mix two different things.
7 And then an area I spent a lot of time in, in
8 graduate school is biomaterials, things that are
9 implanted into the body like an artificial knee or a
10 hip replacement or an interocular lens if you have
11 cataract surgery.
12 And as a material scientist, we are taught and
13 learn all the properties of these different materials:
14 strength, weaknesses, ability to withstand corrosion or
15 not, and what are the right materials to use for any
16 particular type of engineering project. For example --
17 and I use this example a lot. If you're building a new
18 bridge, the new Bay Bridge that went up, a material
19 scientist would have been involved in that. And he
20 would be the go-between the civil engineer and the
21 mechanical engineer and the engineer who designed that
22 bridge.
23 What is the best concrete? What are the new
24 types of metal alloys that could be used that are
25 stronger, cheaper, better corrosion resistance. So a

1 material scientist would have been involved in most of
2 those aspects.
3 All your major semiconductor advances over the
4 years has been due to material scientists. I don't
5 know about now, but the CEO of Intel was a material
6 scientist at one point in the past.
7 So we understand where the products and
8 materials should be used, what kind of temperature --
9 strengths, temperature, resistance, et cetera. And
10 also as a material scientist, we -- they develop new
11 materials. Again, the semiconductor advances, the
12 ceramics on the -- that were developed for the space
13 shuttle, the -- even as simple as the changeover, if
14 your result is me, from the metal soda can to the
15 aluminum soda can. That was a material scientist who
16 came up with that particular aluminum/copper alloy,
17 mixture of two metals, to be able to make that into a
18 one-step process.
19 The last thing material that scientists do a
20 lot about is almost forensic engineering: What went
21 wrong? Is there a contaminant here? Why did this
22 break? What's in these ingredients that shouldn't be
23 in these ingredients? Say, a manufacturer is making
24 injection molding of these polyethylene plastic cups
25 and all of a sudden in the field they're not holding up

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1 and they're leaking.
2 The material scientist could probably go in and
3 figure out where in that engineering molding process,
4 is it the right materials, is it the right polymer.
5 And that's what I do at my lab a lot, is the forensic
6 engineering side of things.

7 Q. So let me talk about your lab. You currently
8 have a lab of how many employees?

9 A. We have a lab in Suwanee, Georgia, and
10 currently I think we're up to about 46 employees.

11 Q. And what are the type of professionals work
12 with you in your lab, what type of scientists?

13 A. I have other material scientists like myself.
14 We have physicists. We have inorganic chemists;
15 organic chemists; microbiologists; industrial
16 hygienists; geologists; mineralogists; mechanical
17 engineering; physicists -- I think I may have said
18 that. I think that covers it. Oh, and electron
19 microscopist specialist; polarized light microscopist
20 specialist; and, of course, the support staff, the
21 admin people that really run the company.

22 Q. And with regards to asbestos, how long have
23 you -- have you been involved in the analysis for the
24 presence of asbestos?

25 A. Yes, sir, I have.

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1 Q. For how long?

2 A. A little bit over 30 years.

3 Q. And with regards to asbestos issues, have you
4 made presentations or publications involving asbestos
5 or asbestos exposure?

6 A. I have.

7 Q. Have you tested many different products for the
8 presence of asbestos over the course of your career?

9 A. Yes, sir. Early years myself and also our lab.

10 Q. And approximately how many products or
11 specimens have you examined, you and your laboratory
12 examined, to determine whether asbestos is present or
13 not?

14 A. A large number of different types of products,
15 but just pure numbers of samples, our laboratory is
16 approaching close to 400,000 individual analysis of
17 samples, different samples for asbestos.

18 Q. And some of the testing and testing results
19 have you published in the peer-reviewed literature?

20 A. We have.

21 Q. And have you made presentations regarding your
22 findings of asbestos in some of the samples?

23 A. Yes, sir, we have.

24 Q. And with regards to your professional
25 organizations, what are some of the associations,

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1 organizations you belong to?

2 A. The American Industrial Hygiene Association,
3 the Materials Research Society, the Microscopist
4 Society, the American -- I've said that already.
5 American Industrial Hygiene, the American Society of
6 Testing Materials, the Ceramics Society, Materials and
7 Methods Group. There's a number of them. Adjunct
8 member of the American Conference of Governmental
9 Industrial Hygienists. I'm not an American
10 Industrial -- a Governmental Industrial Hygienist, but
11 you can be an adjunct on to that. And also I am a
12 board certified forensic engineer.

13 Q. Now, with regards to industrial hygiene, you
14 said you're not a member of -- you're not a member of
15 the American Conference of Government Industrial
16 Hygienists?

17 A. No. I'm not a full member. You have to have
18 worked for the government to be an -- as an industrial
19 hygienist, but you can be an adjunct member so you can
20 get the information.

21 Q. Have you reviewed and studied the scientific
22 literature on industrial hygiene about asbestos over
23 the course of your career?

24 A. Yes, I have.

25 Q. And in developing your expertise as a forensic

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1 engineer and material scientist, have you studied
2 exposures to asbestos that occur -- that individuals
3 have occurred historically?

4 A. I have.

5 Q. And have you reviewed those scientific
6 literature in that regard?

7 A. Yes, sir, I have.

8 Q. Do you, Dr. Longo, have specialized knowledge,
9 skill, and experience regarding exposures to asbestos
10 that folks have had based upon your review of the
11 scientific literature?

12 A. Yes, sir.

13 Q. Now, have you -- well, let me ask you about
14 your laboratory. Is your laboratory certified by any
15 organization?

16 A. It is.

17 Q. And what organization has certified your
18 laboratory?

19 A. We're certified by the American -- the American
20 Industrial Hygiene Association for analyzing asbestos
21 air samples. As well as asbestos bulk samples. We're
22 certified by the National Voluntary Laboratory
23 Accreditation Program for the analysis of asbestos by
24 transmission electron microscopy as well as bulk
25 samples by polarized light microscopy.

1 We're an International Standards Organization
2 certified for quality control, QC, as well as some
3 specialized testing, including water analysis for
4 asbestos. And we're also certified by 0 -- by ISO to
5 certify other laboratories that they follow a
6 particular type of analysis or protocol. And we're --
7 also we have -- we're registered laboratory for the --
8 for the FDA. So that we can analyze all types of
9 pharmaceutical-type materials from Schedule 2 on down.

10 We are certified by the DEA to handle those
11 types of products that come into the laboratory.
12 Again, Schedule 2 on down.

13 I guess that covers it, other than individual
14 certifications from groups that come in so that they
15 feel comfortable that when we do work or analysis for
16 them.

17 Q. What type of organizations have you consulted
18 with over the course of your career with regards to
19 testing materials including asbestos?

20 A. The FAA. We have consulted for the General
21 Services Administration, the Environmental Protection
22 Agency. NATO in Germany, when the Berlin Wall came
23 down, we were asked to analyze to see if that wall had
24 asbestos in it.

25 We have -- we have consulted for the Department

1 of Defense; for the U.S. Treasury; for National
2 Institutes of Health; for the CDC, Center for Disease
3 Control; and a number of companies outside this kind of
4 environment where we do problem-solving for them as
5 well as just regular analysis.

6 Q. Now, you're consulting at my request, me and
7 Ms. Clancy's request, in this case.

8 Have you done this in the past where you've
9 testified in cases involving injury and litigation?

10 A. Yes, I have.

11 Q. And have you testified at the request of
12 plaintiffs as well as the request of defendants in
13 litigation?

14 A. I have.

15 Q. I want to ask you about the ASTM D22. What is
16 that?

17 A. The American Society of Testing Materials is a
18 nonprofit organization, where most anybody can join,
19 and it is the largest group out there that develops
20 standards or testing for almost anything. There's
21 40- -- almost 40,000 members now.

22 And the D22 committee, is what I'm a member of
23 produces methods -- testing methods which, essentially,
24 is just a recipe, go from A to Z, so that labs can
25 standardize particular tests for analysis of different

1 types of matrices -- water, dust, et cetera -- for
2 asbestos.

3 Q. And how long have you been a part of the D22
4 committee or subcommittee?

5 A. Since approximately 1989 or so.

6 Q. And did you have any role in leading that
7 committee in the past or being part of leadership of
8 that committee?

9 A. Not leadership in the committee, but I was
10 tasked to being the shepherd or the person to push
11 through and write the test method for analyzing dust
12 for asbestos, building dust. The -- and I spent six
13 years doing that.

14 Q. Now, with regards to the tools that you use as
15 a material scientist for the identification of
16 asbestos, the jury has already heard last week from Lee
17 Poye about the transmission electron microscope. You
18 utilize that tool?

19 A. We do.

20 Q. How many TEMs do you have?

21 A. Currently, we have four.

22 Q. And how long have you had specialized
23 knowledge, skill, and experience in utilizing the
24 transmission electron microscope?

25 A. Over 30 years.

1 Q. The jury has heard about the scanning electron
2 microscope. Do you have a scanning electron
3 microscope?

4 A. We do.

5 Q. And how long have you utilized the scanning
6 electron microscope in your laboratory?

7 A. Over 30 years.

8 Q. The jury has heard about polarized light
9 microscopes. Do you have polarized light microscopes
10 in your lab?

11 A. We do.

12 Q. How many?

13 A. I think around 10.

14 Q. And how long has your laboratory utilized
15 polarized light microscopes historically?

16 A. Over 30 years.

17 Q. Will you -- do you have specialized knowledge
18 and experience in explaining what is seen under these
19 microscopes and what's identified and how they're
20 characterized? Will you be able to do that -- do that
21 today?

22 A. Yes, sir, I believe so.

23 Q. With -- specifically with regard to industrial
24 hygiene, you mentioned that you're a member of the
25 American Industrial Hygiene Association.

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1 How much literature have you looked at with
2 regard to asbestos in terms of exposures over the
3 course of your career?
4 **A. I think the number of published papers I've**
5 **reviewed has to be in the hundreds.**
6 **Q.** And with regards to your analysis of exposures,
7 do you review and consider historical company
8 documents?
9 **A. Yes, sir, I do.**
10 **Q.** And specifically in this case, have you
11 reviewed and looked at some of the Johnson & Johnson
12 historical documents regarding asbestos issues?
13 **A. Yes, I have.**
14 **Q.** And have you specifically looked at some of the
15 Colgate documents regarding asbestos issues?
16 **A. Yes, sir.**
17 **Q.** And in some of these historical documents --
18 and we'll talk about them a little bit later -- are
19 there technical-type terms mentioned in some of them
20 that you can help explain some of these terms?
21 **A. Yes, sir, I believe so.**
22 **Q.** The jury's probably heard of some of them, but
23 we -- we may go through some -- some more of those.
24 I asked you about your organizations, and I
25 just want to make sure -- I don't know -- the National

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1 Asbestos Council, were you a member of that
2 organization?
3 **A. Yes, sir, I am.**
4 **Q.** The Environmental Information Association, are
5 you a member of that organization?
6 **A. Yes, sir, I am.**
7 **Q.** The Electron --
8 **A. The National Asbestos Council, that morphed**
9 **into the Environmental Information Association. So**
10 **that's really one group.**
11 **Q.** Okay. I see.
12 And then the Electron Microscopy Society
13 association, are you member of that organization?
14 **A. Yes, sir. Yes, sir.**
15 **Q.** The Microbeam Analysis Society, are you a
16 member of that organization?
17 **A. That, too.**
18 **Q.** Are you a member -- have you been a member of
19 the New York Academy of Science?
20 **A. I have been a member in the past.**
21 **Q.** Have you been a member of the National
22 Institute of Building Sciences?
23 **A. Yes, sir. I still am.**
24 **Q.** Have you been a member of the Society for
25 Ultrastructural Pathology?

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1 **A. Yes, sir, I have been.**
2 **Q.** And in the past, have some of the publications
3 that you've published and been the co-author been on
4 asbestos issues with pathologists?
5 **A. Yes.**
6 **Q.** Okay. Does your laboratory -- in addition to
7 looking at products, has your laboratory looked at
8 tissue, human tissue, for asbestos, the presence of
9 asbestos?
10 **A. We have.**
11 **Q.** The American College of Forensic Examiners, are
12 you a member of that organization?
13 **A. Yes, sir. That's actually the one I'm board**
14 **certified in and now have been made -- been elected to**
15 **be a diplomat in that organization.**
16 **Q.** And have you -- specifically with regard to
17 talc and exposures from talc, have you studied the
18 scientific literature from an exposure perspective to
19 form the basis of your opinions here today?
20 **A. Yes.**
21 **MR. SATTERLEY:** Your Honor, at this time, I
22 would offer Dr. Longo as an expert in material science,
23 asbestos testing, and exposure.
24 **THE COURT:** Mr. Calfo, do you wish to inquire
25 of this witness on his qualifications?

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1 **MR. CALFO:** Your Honor, we'll reserve our
2 questioning for later.
3 **THE COURT:** Mr. Mularczyk?
4 **MR. MULARCZYK:** No questioning at this time,
5 Your Honor.
6 **THE COURT:** All right.
7 Ladies and gentlemen, this witness will be
8 certified as an expert in material science, forensic
9 engineering, testing for asbestos, and exposure to
10 asbestos.
11 During this trial, you will hear testimony from
12 expert witnesses. The law allows an expert to state
13 opinions about matters in his or her field of expertise
14 even if he or she does not witness any of the events
15 involved in the trial.
16 You do not have to accept an expert's opinion.
17 As with any other witness it is up to you to decide
18 whether you believe the expert's testimony and choose
19 to use it as a basis for your decision. You may
20 believe all, part, or none of an expert's testimony.
21 In deciding whether to believe an expert's
22 testimony, you should consider the expert's training
23 and experience, the facts that the expert relied on,
24 the reasons for the expert's opinion.
25 The law allows expert witnesses to be asked

1 questions that are based on assumed facts. These are
2 sometimes called hypothetical questions.

3 In determining the weight to give to the
4 expert's opinion that is based on assumed facts, you
5 should consider whether the assumed facts are true.

6 If expert witnesses disagree with one another,
7 you should weigh each opinion against the others. You
8 should examine the reasons given for each opinion and
9 the facts or other matters that each witness relied
10 upon. You may also compare the experts'
11 qualifications.

12 With that in mind, Mr. Satterley, you may
13 inquire on direct examination.

14 MR. SATTERLEY: Thank you, Your Honor.

15 BY MR. SATTERLEY:

16 Q. Dr. Longo, I'll jump to the -- your opinions
17 first. Then we are going to backtrack and go through a
18 lot of the bases for your opinions.

19 Do you have an opinion, Dr. Longo, based upon
20 everything you've looked at -- internal company
21 documents, historical documents, the scientific
22 literature, all the testing that you've done -- whether
23 or not Johnson & Johnson Baby Powder historically has
24 included asbestos as a part of it?

25 A. I do have an opinion.

1 Q. And what is your opinion?

2 A. That it does.

3 Q. Do you have an opinion, Dr. Longo, based upon
4 historical review of company documents, your review of
5 the scientific literature, your own -- your
6 laboratory's own testing of Cashmere Bouquet product,
7 whether the Cashmere Bouquet historically has included
8 asbestos as a part of it?

9 MR. MULARCZYK: Objection. Foundation.

10 THE COURT: It's overruled.

11 THE WITNESS: Yes, I do have an opinion.

12 BY MR. SATTERLEY:

13 Q. And what is your opinion?

14 A. That that product does.

15 Q. And with regards to this case, did you evaluate
16 Ms. Schmitz' exposure to those products, both Johnson &
17 Johnson Baby Powder and Cashmere Bouquet?

18 A. Yes, I did.

19 Q. And have you reviewed testimony of her and her
20 sisters that was given under oath with the attorneys
21 for these companies?

22 A. Yes.

23 Q. And have you developed an opinion or formed an
24 opinion with regards to her exposures to asbestos from
25 these products?

1 A. Yes, I did.

2 Q. And what is your opinion?

3 A. That she was exposed to asbestos from the use
4 of these two manufacturers' products.

5 Q. And did you issue a signed report with your
6 calculations regarding the exposures she had?

7 A. I did.

8 Q. And in your opinion, based upon her many years
9 of use of these products and being around the products
10 when her family members were using them, do you have an
11 opinion whether those exposures was a substantial
12 exposure to asbestos from their products?

13 MR. MULARCZYK: Objection. Foundation.

14 THE COURT: Sustained.

15 BY MR. SATTERLEY:

16 Q. We'll go through the math in a little bit.

17 With regards to Johnson & Johnson -- let's
18 start with Johnson & Johnson -- have you reviewed
19 historical documents with regards to their testing,
20 testing done by laboratories at their request?

21 A. Yes.

22 Q. And with regards to Colgate-Palmolive, have you
23 reviewed testing by laboratories of the Cashmere
24 Bouquet product for the presence of asbestos?

25 A. Yes.

1 Q. And based upon your review of the historical
2 documents, do you have an opinion whether it was
3 documented back in the 19- -- with regards to Johnson &
4 Johnson first, back in the 1960s and the 1970s,
5 asbestos being present?

6 MR. CALFO: Objection, Your Honor. No
7 foundation for this witness.

8 MR. MULARCZYK: And hearsay, Your Honor.

9 THE COURT: Overruled on both.

10 THE WITNESS: Yes, I do have an opinion.

11 BY MR. SATTERLEY:

12 Q. And with -- and with --

13 A. That it is -- that it does.

14 Q. What is your opinion?

15 A. The opinion is that it does.

16 Q. Okay. And we'll go through some of the
17 documents here in a little bit.

18 With regards to Colgate-Palmolive, once again,
19 did you look at the historical documents in the 1970s,
20 '80s, and '90s regarding the Cashmere Bouquet product?

21 A. Yes, sir.

22 Q. And based upon your review of the historical
23 documents of the Cashmere Bouquet product, was it
24 documented in the '70s, '80s, '90s and forth -- so
25 forth, the presence of asbestos?

1 MR. MULARCZYK: Same objections, Your Honor.
 2 THE COURT: It's overruled.
 3 THE WITNESS: Yes, it was.
 4 BY MR. SATTERLEY:
 5 Q. First of all, I want to -- I want to ask you a
 6 question -- a few questions. Counsel --
 7 Oh, there it is. That's what I was looking for
 8 right there.
 9 Counsel for Johnson & Johnson told the folks on
 10 the jury that you personally have made \$30 million
 11 working for plaintiffs' lawyers.
 12 Is that true?
 13 MR. CALFO: Objection, Your Honor. Misstates
 14 opening statement. I said the company did.
 15 MR. SATTERLEY: I disagree.
 16 THE COURT: It's overruled. The jury will --
 17 THE WITNESS: No, I have not made \$30 million
 18 working for plaintiffs' attorneys personally.
 19 BY MR. SATTERLEY:
 20 Q. You and your company, the company you work for,
 21 MAS, that's --
 22 You're the president of the company; correct?
 23 A. Yes, I am.
 24 Q. Okay. Is it -- it is true, though, over the
 25 course of 30-some-odd years you've charged for your

1 time in litigation to both plaintiffs -- plaintiffs and
 2 defendants in these forensic situations?
 3 A. Yes, I have.
 4 Q. And would it be fair to say, over 30-some-odd
 5 years, you have charged -- your company has charged
 6 both for your time and all the other folks working --
 7 involved in forensic issues, litigation issues, well
 8 over \$30 million?
 9 A. My time; other individuals that have testified;
 10 all the testing we did over the years, especially in
 11 the property damage litigation, where we did forensic
 12 engineering to identify the products, that would be
 13 fair. That's what our company has billed over
 14 30 years.
 15 Q. With regards to advertising, a Johnson &
 16 Johnson lawyer told the folks on the jury that you
 17 started advertising for plaintiffs' lawyers -- to get
 18 plaintiffs' cases 30-some-odd years ago.
 19 Is that true?
 20 A. That is not true.
 21 Q. We've marked for identification purposes
 22 Exhibit 1099. And if I could --
 23 It's okay.
 24 Let's see. Is the projector on?
 25 May I approach, Your Honor?

1 THE COURT: You may.
 2 BY MR. SATTERLEY:
 3 Q. I'm handing you, Dr. Longo, Exhibit 1095. I
 4 shared it with counsel previously, another copy,
 5 courtesy copy --
 6 THE COURT: Is it 1095 or 1099?
 7 MR. SATTERLEY: 1099, Your Honor.
 8 -- another courtesy copy.
 9 BY MR. SATTERLEY:
 10 Q. Is this a journal called *Asbestos Issues*, dated
 11 June 1990?
 12 A. It is.
 13 Q. And by this point in time --
 14 If I can figure out how to... there we go.
 15 By this point in time, 1990, were you
 16 already -- did you already have specialized skill on
 17 utilizing the transmission electron microscope?
 18 A. Yes, sir.
 19 Q. And did you already consider yourself to be an
 20 expert on utilizing the transmission electron
 21 microscope?
 22 A. Yes. I had spent a lot of time, especially in
 23 graduate school, as well as in my career at that point,
 24 dealing with interpreting, analyzing samples on the
 25 transmission electron microscope.

1 Q. It says in this 1990, "Asbestos management
 2 strategies for new era building owners."
 3 Did your company place an ad in this -- in this
 4 journal?
 5 A. We did.
 6 Q. And did this journal relate to building issues?
 7 A. Yes, sir.
 8 Q. All right. And is this the advertisement that
 9 was placed in this journal in 1990?
 10 A. It was.
 11 Q. Does this in any way relate to you trying to
 12 get business from mesothelioma victims so you can
 13 testify in a courtroom like this?
 14 A. No, not at all.
 15 Q. If somebody were to say this ad right here
 16 proves that you were trying to be an expert for people
 17 suffering from asbestos disease, would that be
 18 accurate?
 19 A. No, sir.
 20 Q. The person in the ad with -- this is you over
 21 here on the right; correct?
 22 A. Yes. I've hardly aged at all.
 23 Q. Okay.
 24 A. Yes, that's me.
 25 Q. Okay. And this fellow on the left, who's that?

1 A. That's Mr. George Yamate.
2 Q. Who is George Yamate?
3 A. George Yamate is the author of the TEM
4 protocol -- and you may hear something about it --
5 typically called the Level 1, Level 2, Level 3
6 analysis. There was a draft method issued in the early
7 1980s or so for the EPA, and it's still a widely used
8 protocol, especially Level 2, in our industry. And
9 George Yamate was the author of that.

10 Q. I want to show you this part right here.
11 It's -- it's hard to read. I've got it blown up here.
12 I showed it to counsel.

13 First of all, it says on here, "final clearance
14 lab," "the final clearance lab." What does "the final
15 clearance" mean?

16 A. Final clearance in this industry is that when
17 there is an abatement of removing asbestos, especially
18 in schools, there's a requirement that they do a final
19 air clearance, which means that once the contractor
20 says, "Yes, we're all done. We got all the asbestos
21 out. Everything is clean. There's no asbestos dust
22 left in this area that we did this in containment" --
23 final air clearance would involve going in and taking
24 air samples while the consultant uses a leaf blower at
25 a hundred miles an hour to disturb any dust that may be

1 laying anywhere to see if there's asbestos present
2 before you let the kids back in the school.

3 That's final air clearance, and it's sort of a
4 term now of art that everybody uses. "Yes, we've got
5 some final air clearance samples coming," we know
6 exactly what that is. And that's what we were
7 advertising for.

8 Q. This paragraph here, it says, "Professional
9 asbestos consultants and contractors know that when the
10 job demands the best final air clearance testing by
11 TEM, you go to the people whose rigorous in-house
12 quality control measures produce TEM results and
13 professional support that stands up to the toughest
14 tests you may face."

15 That was included; correct?

16 A. Yes, sir.

17 Q. And you -- had you and Mr. Yamate in a
18 courtroom somewhere in Georgia; right?

19 A. Yes, it was. It was in rural Georgia, and we
20 took this ad in the courtroom to say that "If you use
21 our laboratory and somebody challenges your final air
22 clearance, saying, 'Oh, it's not really clean,' or 'You
23 should have did this,' we would come in and defend our
24 data. We would" -- "If it goes to court, we would be
25 working for you, saying, 'No, this is what the' --

1 'This is the analysis we did, and it's correct.'"

2 That's what that ad was about.

3 Q. And the folks that would be hiring you for this
4 would be building owners or contractors, people doing
5 asbestos abatement?

6 A. Yes, sir.

7 Q. Okay. This had absolutely nothing to do with
8 talc issues?

9 A. No.

10 Q. Had nothing to do with mesothelioma victims?

11 A. No.

12 Q. Had nothing to do with plaintiff lawyers or
13 anything like that?

14 A. No, sir.

15 Q. Now I want to switch gears and talk about
16 testing and testing methods. Tell us about the
17 strengths of utilizing transmission electron microscope
18 for the identification of asbestos.

19 A. Its strengths are that it's the most sensitive
20 method out there in that it can detect single asbestos
21 fibers and fully characterize them in that if you see a
22 single small fiber, you can get the chemistry of it,
23 utilizing EDXA, or the energy dispersive x-ray. So you
24 can do microchemistry.

25 You can get crystalline structure information

1 by doing the diffraction patterns. I know Mr. Poye
2 probably went through all that when he was here,
3 diffraction patterns.

4 And it allows you to take photographs of these
5 micro- -- these -- these microscopic fibers.

6 And so if you have something there, you can
7 fully characterize it. So it still is the most
8 sensitive method for this type of analysis.

9 Q. I want to show you what's already in evidence,
10 Exhibit 326. This is 1974, January 3rd.

11 MR. SATTERLEY: May I approach, Your Honor?

12 THE COURT: You may.

13 BY MR. SATTERLEY:

14 Q. January 3, 1974, on Johnson & Johnson
15 letterhead. And you've seen this in the past and
16 considered this; correct?

17 A. I have.

18 Q. And this is from A.J. Goudie to Dr. Gaughran
19 and Dr. Shelley, "Purchase of a transmission electron
20 microscope plus attachments."

21 Do you see that?

22 A. I do.

23 Q. And Dr. Goudie says, "Over the past three
24 years, there seems to have been general agreement that
25 transmission electron microscope is the only absolute

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1 proof with electron diffraction for the identification
2 of asbestos in talc."
3 Do you agree with the statement that was said
4 in 1974?
5 A. Yes and no. I would agree, in 1974, that was
6 the absolute best instrument to use, but only for the
7 positive identification.
8 The "no" part is, it's not -- if you don't see
9 asbestos by TEM using that at the time, it doesn't mean
10 that there's no asbestos present. It just means you
11 didn't detect it.
12 So, yes, it is the most -- at that time, it was
13 the best method to use for absolute identification.
14 THE COURT: Mr. Satterley, if you're moving on
15 to something else, would you please identify the
16 document that you have on the screen by the exhibit
17 number.
18 MR. SATTERLEY: I apologize, Your Honor. I
19 thought I did. 326.
20 THE COURT: All right.
21 MR. SATTERLEY: I apologize.
22 The next document that's already into evidence,
23 Exhibit 238. And may I approach again, Your Honor?
24 THE COURT: You may.
25 BY MR. SATTERLEY:

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1 Q. This is March 1974, a confidential Johnson &
2 Johnson memorandum.
3 MR. SATTERLEY: I provided a copy to counsel.
4 Another copy.
5 BY MR. SATTERLEY:
6 Q. And flip over to the second page, page 2.
7 To put this into context, on the first page,
8 does it say it's -- it's to the Windsor Minerals,
9 Windsor, Vermont, from R.C. Reynolds, Dartmouth
10 College?
11 Do you see that on the first page?
12 A. Yes, sir, I do.
13 Q. And this -- "Subject: Analysis of talc
14 products and ores for asbestiform amphiboles"?
15 A. Yes, sir.
16 Q. And on the second page, it says, where I've
17 highlighted here on Exhibit 238, "For the reasons
18 described above, a concentration technique is
19 mandatory" --
20 MR. SATTERLEY: I apologize, Your Honor.
21 Mrs. Schmitz.
22 -- "for the reasons described above, a
23 concentration technique is mandatory because it brings
24 the amphiboles into a reasonable concentration range
25 for optical or other methods of analysis.

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1 "Such a method has been developed, and it" --
2 "it is described in this report."
3 Have you considered this document in your
4 analysis of what's known as the concentration method?
5 A. I have.
6 Q. And based upon this document and many other
7 documents, was the concentration method a method that
8 was discussed within Johnson & Johnson way back in the
9 1970s?
10 A. Yes, sir, it was. Early '70s.
11 Q. And I would like to show you another document
12 that you -- I believe you considered.
13 This is Exhibit 329. It's already into
14 evidence. This is dated June 3, 1973, on Johnson &
15 Johnson letterhead.
16 And do you see it's signed off by
17 Dr. D.R. Petterson?
18 A. I can't see who it's signed off by on --
19 Q. The name at the bottom -- oh, I'm sorry.
20 MR. SATTERLEY: May I approach, Your Honor, and
21 hand the witness -- I apologize.
22 THE WITNESS: I believe you're correct, but I
23 just wanted to check.
24 BY MR. SATTERLEY:
25 Q. Thanks for helping me out there. All right.

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1 You see now, Doctor, that -- D.R. Petterson's
2 name at the bottom?
3 A. I do.
4 Q. And it's carbon-copied to W. Ashton?
5 A. Yes, sir.
6 Q. And have you considered many documents from
7 Bill Ashton, or William Ashton, historically with
8 regard to Johnson & Johnson?
9 A. Yes, sir.
10 Q. And it says in -- it says in the third
11 paragraph -- it says, "Note the use of the
12 concentration technique is the drafted specification
13 for the analysis of asbestos."
14 "Also, I have discussed with Shelley that the
15 samples to be sent by Dr. Rolle will be on 20 recent
16 samples of powder in which we found no
17 tremolite/actinolite by optical technique."
18 I want to stop right there and ask you to
19 explain the optical technique and why you would analyze
20 using a concentration technique if there are no
21 tremolite or actinolite identified.
22 A. The optical technique is using polarized light
23 microscopy, and that is a very good technique as long
24 as the amount of asbestos in there is high enough for
25 it to detect.

1 Every analytical method has an analytical
2 sensitivity/detection limit, where the analyte -- and
3 we all call it analytes -- the asbestos is at a
4 concentration still in there but lower than the optical
5 microscope can detect. You say it's nondetect.

6 So in order to increase the ability to detect
7 it or get a better analytical sensitivity, you go to
8 the concentration method, which is -- literally, you're
9 looking for needles in a haystack. That might take you
10 a long time. You may miss them.

11 If you get rid of the hay and just look for the
12 needles, because the needles are all now concentrated,
13 you can come back and say, "Yes, there are all these
14 needles in the haystack. I just couldn't see them
15 before because there was so much hay, I had to weed
16 through."

17 And that's what the concentration does.

18 Q. Is the concentration method a preparation
19 method that's done before you put it onto the filter
20 before it goes into the microscope itself?

21 A. Yes, sir. That's a good point.

22 These techniques -- polarized light microscopy,
23 XRD, x-ray diffraction, and especially transmission
24 electron microscopy -- it's all about the sample
25 preparation and how good a job you do and how you

1 concentrate it, how you put it together before it goes
2 into what we call tools.

3 Because the analytical transmission electron
4 microscope is just going to give you the same
5 information that it would give you no matter what.
6 It's all about sample preparation.

7 So you prepare the sample in a way that gives
8 the best opportunity to see if you can detect the
9 asbestos at the lower -- the best analytical
10 sensitivity you can. That's all done before you get to
11 the electron microscope.

12 All these techniques, it's all about sample
13 preparation.

14 Q. And with regards to the presence of platy talc,
15 if you prepare a sample where it has lots of platy talc
16 on it, will that -- does that potentially obstruct the
17 analyst's ability to see the asbestos materials?

18 A. Yes. You're covering it up, especially in the
19 transmission electron microscope, or the TEM --
20 everybody calls it TEM.

21 If I have an asbestos fiber here and I have a
22 platy talc on top of it -- we're imaging by using an
23 electron beam, which goes real good for resolution, but
24 it only has so much strength. So it can't go through
25 stuff that builds up.

1 So if here's my asbestos fiber and I have a
2 platy talc here, I go, "Okay. Well, I can see it."
3 But if I start getting more and more platy talc on here
4 because it's so concentrated with it, pretty soon, it's
5 like that. You can't find it, no matter how much you
6 look for it, TEM, if you have too many talc particles
7 in there.

8 Good analogy is that I have a big bowl of
9 spaghetti, and there's a couple of meatballs in there,
10 and I'm just looking at the bowl, and I can't see them.
11 But if I take it and spread it out or I get rid of the
12 spaghetti, the meatballs stand right out.

13 And -- and that's with both polarized light
14 microscope and especially with TEM. If you have too
15 much talc in there, you can't see the asbestos fibers.

16 So what they used to do -- or still -- people
17 still do it -- is, they dilute the sample to spread all
18 that talc out so that you can find the asbestos fibers.
19 But if you dilute the talc particles, you're diluting
20 the asbestos fibers, too. So now I'm spreading it out
21 and making it harder and harder to find something if
22 it's present.

23 If I use the concentration method, I get the
24 talc out of there, and I can concentrate the asbestos
25 down, better opportunity to see if it's really

1 positive, detectable or not.

2 Q. This 1974 Johnson & Johnson document says,
3 "Shelley reports that Pooley" -- you know who
4 Dr. Pooley is?

5 A. Yes, sir, I do.

6 Q. -- "that Pooley has found actinolite in our
7 Vermont talc by his concentration technique. Italian
8 talc by the same technique appears to be free of
9 amphiboles. I have sent the report referred to
10 I.W. Sloan on to Roger Miller for their study."

11 Do you see that?

12 A. Yes, sir.

13 Q. Is this one example in 1973 of the use of the
14 concentration method by analysts finding asbestos that
15 they otherwise would not find by optical microscope?

16 A. That is correct.

17 Q. One other exhibit and then I want to talk -- I
18 want to show the animation on the heavy liquid
19 separation.

20 This is Exhibit 330.

21 MR. SATTERLEY: May I approach, Your Honor?

22 THE COURT: Yes, you may.

23 MR. SATTERLEY: It's already into evidence.

24 BY MR. SATTERLEY:

25 Q. This is November 26, 1974, on Johnson & Johnson

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1 letterhead. And it, Dr. Longo, is signed by a --
2 signature on the second page, John P. Schelz --
3 S-c-h-e-l-z.
4 Do you see that?
5 **A. Yes, sir, I do.**
6 **Q.** Is this a document you considered in
7 formulating your opinions in analyzing this case?
8 **A. Yes.**
9 **Q.** And it says, "It's a review of experimental
10 techniques for the concentration of asbestos minerals
11 in talc, Project Number 0503-00."
12 Do you see that?
13 **A. I do.**
14 **Q.** It says, "Our preliminary investigation of
15 experimental technique for the concentration of
16 asbestos minerals in talc has been in two areas:" And
17 then they have a whole section on -- at the top.
18 Do you see that?
19 **A. I do.**
20 **Q.** And Dr. Fred Pooley is referenced there.
21 **A. Yes, sir, he is.**
22 **Q.** And I want to focus on the second.
23 It says, "The concentration of
24 actinolite/tremolite" -- by the way, actinolite and
25 tremolite, is that a form of asbestos?

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1 **A. It is.**
2 **Q.** And we'll show photographs.
3 Have you seen actinolite/tremolite asbestos
4 under your microscopes?
5 **A. We have.**
6 **Q.** And have you taken photographs of them and
7 demonstrated for the presence of talc?
8 **A. Yes, sir.**
9 **Q.** It says, "The concentration of actinolite,
10 tremolite, and chrysotile from talc by individual heavy
11 liquid separation technique developed by Dr. Robert
12 Reynolds, Dartmouth College. Dr. Reynolds of the
13 Department of Earth Science has been requested by
14 Mr. V. Zeitz" --
15 You know Vernon Zeitz? You know that name?
16 **A. I've have see it on documents.**
17 **Q.** -- "of Windsor Materials (sic) to work on the
18 actinolite concentration technique. This method
19 utilizes the difference in densities between actinolite
20 and other amphiboles and talc to effect separation in a
21 heavy liquid medium."
22 Do you see that?
23 **A. I do.**
24 **Q.** Is that what's sometimes referred to as the
25 heavy liquid separation?

1 **A. It is.**
2 **Q.** So when we talk concentration and we talk heavy
3 liquid separation, are we basically talking about the
4 same process?
5 **A. It is the same process, but you can concentrate**
6 **by other methods for other things, like if you're --**
7 **it's calcium carbonate and -- you can dissolve out the**
8 **calcium carbonate with a slight acid solution. That's**
9 **not what we're dealing with here. They're all**
10 **concentration methods, but this one uses liquid that is**
11 **heavier density than, say, water, to cause things to**
12 **sink versus causing things to float.**
13 Amphibole asbestos will sink, the talc will
14 float because of their different densities.
15 **Q.** It says, "Following Dr. Reynold's procedure, we
16 have been able to detect tremolite by optical
17 microscopy dispersion staining in the separated
18 fraction from a sample containing initially as little
19 as 0.01 percent by weight tremolite in Vermont talc."
20 And I want -- and I want to ask you: The
21 separation process, can be utilized by both the TEM and
22 by a regular microscope?
23 **A. Yes, sir.**
24 **Q.** Okay. And can -- can the separation method
25 be -- once it's separated and prepped out, can it be

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1 looked under what's called a "PLM," a polarized light
2 microscope?
3 **A. Yes, it can.**
4 **Q.** Now I want to switch gears and talk about the
5 animation. And this is Exhibit 1047 for demonstrative
6 purposes only.
7 Have you in the past, Dr. Longo -- well, did
8 you actually assist in the preparation of this
9 animation?
10 **A. I did.**
11 **Q.** And you told me and my graphics people how
12 to -- how the heavy liquid separation process occurred?
13 **A. Yes.**
14 **Q.** And let me --
15 Does this heavy liquid separation animation
16 truly -- accurately demonstrate the process of heavy
17 liquid separation?
18 **A. It does.**
19 **Q.** And as we see this animation perceived through,
20 if you can talk us through what -- what's happening?
21 **A. Here's the centrifuge tube. You have talc in**
22 **the bottom. And then you're putting a heavy liquid**
23 **density material in there so that you can separate the**
24 **talc from any potential amphiboles that might be**
25 **present. So you shake it up and get the talc**

1 distributed through there and put it in a centrifuge
2 where you're spinning it anywhere from 7,000 to
3 9,000 rpm. After you're done, you'll have a talc plug
4 at the top, since it floats, and most of your
5 amphibole -- potential amphibole asbestos minerals will
6 come to the bottom of the centrifuge tube.

7 Once that happens, you can remove the tip. We
8 use a technique by flash freezing the centrifuge tube
9 in liquid nitrogen and using sort of a guillotine-type
10 apparatus to just cut the tip off, and then put that in
11 solution, filter it, and then analyze it.

12 We normally use 30 milligrams of talc when we
13 do this. And we can put the entire amount of the
14 collected material on a TEM filter.

15 If you use 30 milligrams of talc and filtered
16 that on to a TEM filter without doing this, the sample
17 would be black. It would be so thick the electron
18 beams can't go through the sample. You would never be
19 able to do that.

20 So this increases the sensitivity almost
21 10,000 times for the finding of potential amphibole
22 asbestos.

23 Q. Have you utilized, you and your laboratory,
24 utilized the heavy liquid separation technique with
25 regards to samples of Johnson & Johnson, historical

1 samples provided by Johnson & Johnson, for preparation
2 in this case?

3 A. Yes, I have.

4 Q. Have you, you and your laboratory, analyzed
5 Cashmere Bouquet utilizing the heavy liquid separation
6 for the identification of asbestos?

7 A. Yes, we have.

8 Q. And have you issued reports and photographs and
9 documented asbestos after utilizing the heavy liquid
10 separation?

11 A. Yes.

12 Q. Have you and your laboratory utilizing heavy
13 liquid separation preparation and utilize that under a
14 transmission electron microscope?

15 A. Yes, we have.

16 Q. Have you utilized the heavy liquid separation
17 for -- have you utilized the heavy liquid separation
18 specifically regarding Cashmere Bouquet under a
19 polarized light microscope?

20 A. Yes.

21 Q. And will -- a little bit later will you be able
22 to demonstrate the photographs and what's represented
23 in the photographs?

24 A. Yes.

25 Q. Using the heavy liquid separation, the

1 concentration method, did you and your laboratory find
2 asbestos in the Colgate Cashmere Bouquet products that
3 you tested?

4 A. Yes, we did.

5 Q. And did you -- did I specifically send -- ask
6 you to have someone from your lab go to the RJ Lee
7 Group to pick up Cashmere Bouquet samples?

8 A. Yes.

9 Q. And one of your analysts named Zach, did he go
10 up to Pittsburgh, or around Pittsburgh, to get the
11 Cashmere Bouquet samples with the -- that was with the
12 RJ Lee Group?

13 A. Yes, he did.

14 Q. And do you -- did you guys have a chain of
15 custody and document what was -- what was a part of
16 that Cashmere Bouquet product?

17 A. Yes, sir.

18 Q. We'll talk about that in a little bit.

19 Oh, did you find -- did you analyze 20 samples
20 from the samples you received?

21 A. Yes.

22 Q. And of the 20 samples of Cashmere Bouquet,
23 historic Cashmere Bouquet, that you analyzed in your
24 laboratory, how many of them had asbestos in them?

25 A. All of them.

1 Q. All 20?

2 A. Yes, sir.

3 Q. This next exhibit that's in evidence, 251.

4 MR. SATTERLEY: May I approach, Your Honor?

5 THE COURT: You may.

6 BY MR. SATTERLEY:

7 Q. This is dated November 24, 1976. This is by
8 Mr. Ashton to Mr. Lee. Once again, it's Exhibit 251.

9 Is this a document you've considered in
10 analyzing this case?

11 A. Yes, I have.

12 Q. And it's signed off by Mr. Ashton, and it's
13 copied to Dr. Semple and Dr. Petterson on Johnson &
14 Johnson letterhead there.

15 And it says -- in 1976 to Mr. George Lee,
16 "Attached is a copy of a disturbing proposal request
17 which the FDA has currently made available to qualified
18 bidders. The scope of the work is the separation of
19 asbestos in foods, drugs, and talc for identification
20 and determination. I find this proposal more
21 disturbing than other proposals up to now because it
22 aims at separation and isolation of asbestos from a
23 wide scope of products and animal tissues. Up to now,
24 our main problems have had to do with the
25 identification, whereas, now it looks like the FDA is

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1 getting into the separation and isolation methodology
2 which will mean concentration procedures. As I have
3 pointed out many times, there are many talcs on all
4 markets which will be hard-pressed in supporting purity
5 claims when ultra-sophisticated assay separation and
6 isolation techniques are applied. Chances are that the
7 FDA proposal will open up the" -- "open up new problem
8 areas with asbestos and talc minerals."
9 Is that the process by which you utilize on the
10 talcs that you analyzed that we're going to talk about
11 later?
12 A. Yes, it is.
13 Q. Does that isolation and separation of asbestos
14 from talc allow you to see under the microscope the
15 asbestos that was present?
16 A. Yes, it did.
17 Q. And have you also, Dr. Longo, had talc samples
18 analyzed by other techniques like XRD or optical
19 microscope analysis where no asbestos was present but
20 then you looked at it by TEM and asbestos would be
21 present?
22 A. Correct. The XRD would be nondetectable.
23 Regular PLM nondetectable in some cases. Some cases
24 you do find it by regular PLM. Where the TEM or the --
25 using heavy concentration method or PLM heavy

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1 concentration method had the highest percentage of
2 positives where the other techniques on the same sample
3 were negative.
4 Q. Based upon your analysis of all -- all aspects
5 of this case, did the FDA ever adopt or require the
6 isolation and separation method and require folks to
7 utilize this to find asbestos in talc?
8 A. No. They never -- they never finalized that.
9 Q. The next document, before our mid-morning
10 break, Exhibit 234.
11 MR. SATTERLEY: May I approach, Your Honor?
12 THE COURT: You may.
13 MR. SATTERLEY: It's already into evidence.
14 Provide a copy to counsel. This is entitled,
15 Exhibit 234, "Proposed Specs for Analyzing Talcs for
16 Asbestos."
17 And the first page is dated May 16, 1973. And
18 this is on Johnson & Johnson letterhead; correct?
19 A. It is.
20 Q. And just to put it into context, this is signed
21 off by Tom Shelley and carbon-copied to a number of
22 other people, including Dr. Fuller, Dr. Goudie,
23 Dr. Nashed, and Dr. Petterson; correct?
24 A. That is correct.
25 Q. And he says, with regards to the third

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1 paragraph, "England is considering method of
2 preconcentrating the asbestos so as to be able to
3 analyze by x-ray. They find no asbestos by doing this
4 with Italian talc. They find, Pooley, 0.05 percent of
5 a tremolite type in Vermont."
6 Is that a document you considered in coming to
7 your opinions in this case?
8 A. It is.
9 Q. And did you find asbestos in Vermont talcs?
10 MR. CALFO: Objection. There's no foundation
11 for that from this document, Your Honor.
12 MR. SATTERLEY: I'm asking a separate question.
13 THE COURT: He asked whether he found it.
14 THE WITNESS: We have.
15 BY MR. SATTERLEY:
16 Q. If we flip over to page 2, under the Pooley
17 method, talking about the -- the preconcentration of
18 asbestos followed by x-ray diffraction analysis.
19 Now, this -- they called this the "Pooley
20 method" here. It says, "This technique has not been
21 written up yet, but evidently when applied to Vermont
22 talc, 0.05 percent of tremolite talc is found. The
23 limitation of this method is that it may be too
24 sensitive."
25 Do you see that?

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1 A. I do.
2 Q. And from a material standpoint -- from a
3 material science standpoint, do you find that the
4 analytical -- the heavy liquid separation is too
5 sensitive?
6 A. No. Saying something is too sensitive in the
7 analytical world makes no sense. You're always
8 striving to get better and better detection limits to
9 be able to fully characterize. That's how all progress
10 is made through the years in analytical equipment:
11 making it better, more sensitive so you can get the
12 information. Now, what you do with that information
13 may or may not use it, but -- it's just something that
14 is foreign to our -- to me that you would say some
15 analytical method is too sensitive.
16 MR. SATTERLEY: Your Honor, it may be a good
17 time for the mid-morning break.
18 THE COURT: What time is it? It's 10:30.
19 MR. SATTERLEY: Is that okay?
20 THE COURT: Sure. We will take our mid-morning
21 break. Come back in 15 minutes.
22 Please remember the admonition that it is your
23 duty as jurors not to converse amongst yourselves or
24 with anyone else on any subject connected with the
25 trial or to form or express any opinion thereon until

1 the matter is submitted to you.

2 Enjoy your break.

3 (Whereupon, the jury having exited the

4 courtroom, the following proceedings were held:)

5 THE COURT: The record will reflect the jurors

6 have departed the courtroom.

7 Is there anything we need to put on the record?

8 MR. SATTERLEY: Nothing from the plaintiff,

9 Your Honor.

10 MR. CALFO: No, Your Honor.

11 THE COURT: Enjoy your break.

12 MR. MULARCZYK: Thank you, Your Honor.

13 (Recess taken.)

14 (Whereupon, the following proceedings were held

15 outside the presence of the jury:)

16 MR. SATTERLEY: We want -- we'd like to put

17 Your Honor on notice that we've agreed that I've met

18 and conferred with counsel that I'm going to use two

19 scales as demonstratives under the Elmo, if I can

20 figure out how to do this, just for -- to -- for the

21 detection limit, not right this second but later this

22 morning. It's a demonstrate testify to show the

23 limitations of detection. And counsel, I've shared

24 this with counsel and both counsel agrees.

25 THE COURT: All right.

1 Ms. Hill, please bring the jury in.

2 What was the last number?

3 THE WITNESS: Your Honor, I think it's 0234.

4 MS. CLANCY: Thank you.

5 (Whereupon, the jury having entered the

6 courtroom, the following proceedings were held:)

7 THE COURT: The record will reflect that all

8 the jurors are in their appointed seats, counsel are

9 present, and William Longo is in the witness box.

10 Please recall that you're still under oath.

11 THE WITNESS: Yes, Your Honor.

12 THE COURT: You may continue with your direct

13 examination of this witness.

14 MR. SATTERLEY: Thank you, Your Honor.

15 BY MR. SATTERLEY:

16 Q. Dr. Longo, we're going to continue to just talk

17 on one more document on -- regarding asbestos and talc.

18 This is Exhibit 350.

19 MR. SATTERLEY: May I approach again,

20 Your Honor?

21 THE COURT: You may.

22 BY MR. SATTERLEY:

23 Q. And this is from the same Tom Shelley we saw

24 earlier. March the 30th, 1973.

25 And is this a document you've considered in

1 evaluating the issue -- issues in this case?

2 A. Yes, sir.

3 Q. And this is carbon-copied to a large number of

4 folks, including many of the folks we talked about

5 earlier: Petterson, Nashed, Hildick-Smith, Rolle,

6 Goudie, Fuller, and Dr. -- or Mr. Dean in England;

7 correct?

8 A. That is correct.

9 Q. And it relates to asbestos talc -- or talc

10 asbestos patents. And Dr. Pooley. It says, "Harold,

11 we will want to carefully consider the Pooley patents

12 re asbestos in talc. It's quite possible that we may

13 wish to keep the whole thing confidential rather than

14 allow it to be published in patent form and thus let

15 the whole world know."

16 Do you see that?

17 A. I do.

18 Q. Have you ever seen any patents developed by

19 Johnson & Johnson or any of the scientists at Johnson &

20 Johnson regarding the concentration technique, heavy

21 liquid separation, to identify asbestos in talc?

22 A. No. None exists that I can tell.

23 Q. Now, you've reviewed, you said earlier,

24 historical testing of baby powder and talcum powder for

25 the presence of asbestos going back into the 1970s and

1 beforehand; correct?

2 A. That is correct.

3 Q. And have you also -- or do you understand that

4 the Shower -- the Shower to Shower product -- you

5 looked at some of the -- Lee Poye's analysis of Shower

6 to Shower; correct?

7 A. We did.

8 Q. And, based upon all the materials you reviewed,

9 do you understand that the Vermont talc was the source

10 of Shower to Shower for many years, including in the

11 1970s?

12 A. That is correct.

13 Q. And is it important to look at the Shower to

14 Shower product and the analysis of Shower to Shower in

15 understanding whether or not asbestos was present in

16 Vermont talcs?

17 A. It is.

18 Q. Now, the concentration method, the heavy liquid

19 separation method, is there a limitation with regards

20 to the ability to see chrysotile with that method?

21 A. There is.

22 Q. And what is that limitation?

23 A. The limitation is the density of chrysotile

24 asbestos is very close to the density of talc.

25 Talc is approximately -- you have 2.7 to

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1 2.6 grams per cubic centimeter. Like a sugar cube, how
2 much that weighs, how many grams will fit in a sugar
3 cube.

4 And chrysotile is about 2.5, 2.4.

5 So you would not expect to see chrysotile using
6 the method as written. It will float up to the top
7 with the talc. Also, anthophyllite asbestos has a
8 density close to talc. If it doesn't have any iron.
9 If it has iron, the density increases and you will --
10 if it's present in the amount necessary, you'll find it
11 by the heavy liquid density separation. So those are
12 the two drawbacks currently for the heavy liquid
13 density separation.

14 Q. Well, those drawbacks that you can't find
15 chrysotile -- the drawback that you can't find
16 chrysotile asbestos with the heavy liquid separation,
17 in your opinion, Dr. Longo, is that a reason why you
18 should never ever, ever, ever use it?

19 A. No. That would be silly. You can find
20 tremolite, actinolite, all the tremolite asbestos solid
21 solution series. The majority of what you find in
22 anthophyllite has iron in it. So -- and, of course,
23 the solid solution series with the other asbestiform
24 minerals that can form when anthophyllites form. So,
25 no. You're -- yeah, it's simple. Why throw the baby

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1 out with the bath water when you can get so much
2 information using that?

3 Q. Historically going back into the 1970s, was
4 Shower to Shower examined for -- and chrysotile
5 asbestos been documented in that product?

6 A. It has.

7 Q. And I'd like to show you what's already
8 admitted into evidence.

9 MR. SATTERLEY: Your Honor. May I approach
10 again?

11 THE COURT: You may.

12 BY MR. SATTERLEY:

13 Q. This is Exhibit 0278, the University of
14 Minnesota Space Science Center.

15 Have you considered this, Dr. Longo, in your
16 analysis of whether or not there's asbestos in Vermont
17 talcs?

18 A. Yes.

19 Q. And does -- was this the analysis of Shower to
20 Shower product back in 19' -- in the early 1970s for
21 the identification of asbestos?

22 A. Yes, sir, it was.

23 Q. If you can flip over to page 4. And do they
24 describe -- and just so that we --

25 Let me zoom out. Zoom out.

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1 The University of Minnesota Space Science
2 Center. Page 4.

3 Do they utilize the electron microscope to
4 identify chrysotile asbestos?

5 A. Yes, sir, they do.

6 Q. And do they indicate that they were taking
7 photographs -- well, first of all, they did a
8 diffraction pattern and they take photographs of the
9 chrysotile asbestos they located in the Shower to
10 Shower product?

11 A. That is correct.

12 Q. And if we flip over to the Figure 17A and 18A.
13 They take a picture of -- it says "S to S grid." And
14 they got a grid number there?

15 A. Correct.

16 Q. And is that -- is that a photograph of a
17 chrysotile asbestos fiber in the Shower to Shower
18 product in the early 1970s by Dr. Hutchinson?

19 A. Yes, sir. That's actually a chrysotile bundle
20 and that's sitting on a foam -- formed -- foam bar grid
21 covering. And that's -- that would be classic
22 asbestos.

23 Q. And over here on the next page, two pages
24 later, page 25 of this exhibit, Figure 18A, once again,
25 Shower to Shower.

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1 Does this demonstrate the chrysotile asbestos
2 in the Shower to Shower product?

3 A. Yes and no.

4 Q. Well, tell me yes and no.

5 A. Yes, it has the morphology and this is what you
6 would expect. But they also, if you go to the previous
7 page, they have their diffraction patterns associated
8 with this. And you can't hardly see it there, but it
9 has some classic streaking on it. That's a little
10 small.

11 But they did two things. It has to have the
12 right morphology tubular structure and then the
13 diffraction pattern showing the right crystalline
14 structure.

15 Q. If we flip to the next page. This one is the
16 one you said "yes and no" to. What about the next page
17 here, Figure 18B, what does this demonstrate?

18 A. Again, it demonstrates bundles of chrysotile
19 asbestos along with the other information, so you have
20 chrysotile here.

21 Q. And does this assist in your opinion -- or does
22 this add to your opinion, I should say, that there is
23 historically asbestos documented in Vermont talc?

24 A. Yes, sir.

25 Q. The next document already into evidence is

1 Exhibit 6 -- 679.
2 MR. SATTERLEY: And request permission to
3 approach, Your Honor?
4 THE COURT: You may.
5 BY MR. SATTERLEY:
6 Q. And this is October 27, 1972. An examination
7 of Johnson & Johnson Baby Powder sent to Dr. Goudie.
8 Exhibit 679.
9 And have you seen and considered this
10 examination by McCrone from 1972, Dr. Longo?
11 A. Yes, sir, I did.
12 Q. And did McCrone -- McCrone laboratory identify
13 asbestos in this examination in 1972?
14 A. They did.
15 Q. By the way, let me talk about McCrone for a few
16 minutes.
17 Walter McCrone, did you know who he was?
18 A. Yes, sir. Everybody does in the microscopy
19 field.
20 Q. Was he recognized as someone that was very --
21 very good at the PLM, the polarized light microscope?
22 A. He was a polarized light microscope expert.
23 Q. As far as his involvement with the transmission
24 electron microscope, was Walter McCrone known to be a
25 TEM person?

1 A. Well, he understood it, but he didn't routinely
2 do transmission electron microscopy. His area and the
3 McCrone Atlas that every PLM lab has was polarized
4 light microscopy of all types of minerals. I mean, he
5 was the one who looked at the Shroud of Turin. He's
6 that good of an optical microscopist.
7 Q. With regards to McCrone laboratory, have you
8 previously in the past stated that McCrone laboratory
9 is an outstanding laboratory?
10 A. Yes, sir, I have.
11 Q. And have you said that they're one of the
12 leaders in the world, McCrone is one of the leaders in
13 the world, in the microscope world?
14 A. Yes, sir. I've worked for some of the same
15 clients that they had done analysis for back in the
16 '70s and '80s where I was defending them and saying,
17 they used McCrone. They used a very good lab to tell
18 them that there was asbestos or not in a product.
19 There was a little -- it was a fertilizer company. So
20 I have stated that a number of times.
21 Q. And was -- when you stated that a number of
22 times, and gave those opinions about McCrone, was that
23 prior to your analysis of all these internal documents
24 you've looked at in talc litigation?
25 A. Yes, sir. It was before that where I was able

1 to get documents from McCrone to start looking at the
2 type of analysis they were doing, and some of the
3 things they were doing -- and you have to understand.
4 Walter McCrone very rarely -- after about 1960 very
5 rarely was in the laboratory. He was running the
6 McCrone Research Center, a nonprofit that did teaching,
7 et cetera. It was others that were actually in charge
8 of McCrone after about 1960 or so. Every now and then
9 he would, but very rarely.
10 Q. And do you have -- have you formed opinions and
11 criticisms of some of the analysts of -- from Walter
12 McCrone that you've seen from looking at some of these
13 McCrone reports involving talc?
14 A. Yes, sir, I have criticized them.
15 Q. And what opinions have you formed?
16 A. Things like, you know, willingness to change
17 little things -- change on reports, saying things like
18 they've never found asbestos in all the talc samples
19 they ever used. That was a letter sent out to a trade
20 organization, even though they had data that showed
21 asbestos, internal data, for their talcum powder or
22 baby powder companies they were working for.
23 So, you know, it changed my opinion a little
24 bit of them. They're still great scientists there, but
25 it sort of -- you know, it sort of was, oh, okay.

1 Q. So, is it fair to say you got analyzed, analyst
2 by analyst, with regards to what they've done
3 historically?
4 A. Not only that, you have to look at what methods
5 they were using. Are they using the best method
6 available? Is the results consistent -- do the results
7 make sense or can they make these statements, like this
8 talc sample -- this talcum powder sample or cosmetic
9 talc sample was negative and therefore it's free of
10 asbestos?
11 Nobody can ever say that. No analytical
12 technique can ever say it's free of anything. All's
13 you can say is, it's down to our detection limit, it's
14 below our detection limit, and it may or may not be
15 there.
16 Making broad statements like there's nothing
17 in -- we didn't find anything so it's asbestos-free or
18 it's -- anything. Like water. Well, we analyzed this
19 water using the EPA method, there's no lead, it's
20 lead-free. You can't say that. All's you can say is,
21 here's the method we used, here's the analytical
22 sensitivity. We can't say if there's anything there or
23 not below that.
24 Q. This 1972 McCrone report, where it's produced
25 to us by Johnson & Johnson, Exhibit 0679, it says, "Do

1 not use this report. Replace by another version."
 2 Have you considered this?
 3 **A. I have.**
 4 **Q.** And in this report, do they actually document
 5 asbestos and talk about asbestos found in Batch
 6 Samples 108T and 109T?
 7 **A. Yes, sir, they did. They reported it as**
 8 **present.**
 9 **Q.** And specifically with regard to tremolite, in
 10 the report that says, "Do not use this report," do they
 11 totally -- do they list the total tremolite content of
 12 the two samples would be approximately 0.5 percent for
 13 108T and about 0.2 to 0.2 -- 0.2 to 0.3 percent for
 14 109T?
 15 **A. Yes.**
 16 **Q.** And in the new report, the revised report, is
 17 it dated the same date?
 18 **A. It is.**
 19 **Q.** And does it have -- is this information, these
 20 numbers and calculations, removed from the report?
 21 **A. They are.**
 22 **Q.** And then the next document I think it's related
 23 to this document here. This is Exhibit 225.
 24 **MR. SATTERLEY:** Request permission to approach,
 25 Your Honor?

1 **THE COURT:** You may.
 2 **BY MR. SATTERLEY:**
 3 **Q.** And just so we're clear, the -- well, let me
 4 just withdraw that and go right to this report.
 5 225 into evidence. It says, "McCrone study
 6 being redone." Something...
 7 **A. I think that says, "New one is in master**
 8 **file" -- in --**
 9 **Q.** Oh. "New one is in master talc file."
 10 Do you see that?
 11 **A. Yes, sir.**
 12 **Q.** And we see this -- over here, it says,
 13 "Walter C. McCrone" there?
 14 **A. Yes.**
 15 **Q.** And if we go to the letter itself, it's dated
 16 the same day, October the 27th?
 17 **A. Yes, sir, it is.**
 18 **Q.** And it says -- this is from a fellow named
 19 Ian Stewart.
 20 You recognize -- or did you -- you recognize
 21 Ian Stewart to be an analyst that worked at McCrone?
 22 **A. Yes, sir. He was both a PLM and electron**
 23 **optics guy. I've known Ian for almost 30 years.**
 24 **Q.** Did Ian Stewart work for McCrone for many, many
 25 years before he went to the RJ Lee Company?

1 **A. Yes, sir, he did.**
 2 **Q.** And have you read and seen reports and letters
 3 from Ian Stewart many times in the past?
 4 **A. Specifically in cosmetic talc it's -- since**
 5 **I've been involved in this, but in other litigation in**
 6 **the past, especially when he was at the RJ Lee Group,**
 7 **yes, sir.**
 8 **Q.** It says -- Ian Stewart says, "Here is our
 9 report on the baby powder samples. I hope to have the
 10 Shower to Shower report out to you soon, but something
 11 always seems to break loose when I sit down to write
 12 it. Yours sincerely." And it's signed by Ian Stewart;
 13 correct?
 14 **A. Yes, sir.**
 15 **Q.** Moving forward in time, in the '70s, are there
 16 many other tests and testing results where McCrone does
 17 analysis for talc samples?
 18 **A. Yes, sir.**
 19 **Q.** And are there instances where McCrone reports
 20 there's no asbestos?
 21 **A. A lot of instances, yes, sir.**
 22 **Q.** And is there reports where McCrone reports
 23 there's asbestos present?
 24 **A. Yes, sir.**
 25 **Q.** I want to show you another document,

1 Exhibit 158.
 2 And this is a -- Exhibit 158 is a confidential
 3 document. "New reagent system plant trial at Windsor
 4 Minerals."
 5 Have you considered this, Dr. Longo?
 6 **A. Yes, sir, I have.**
 7 **Q.** And how is this significant in your opinions
 8 here?
 9 **A. It's significant in that they were trying out**
 10 **different flotation, meaning, one of the ways to clean**
 11 **up the processed talc after it's been milled is to --**
 12 **or before milling is to flotote it to -- just like**
 13 **concentration method. You put in a type of surfactant**
 14 **and it bubbles, sticks to the talc, the big heavy stuff**
 15 **and chunks can go to the bottom.**
 16 **Here they were experimenting with a way to**
 17 **flotote out and remove chrysotile asbestos.**
 18 And you have to ask yourself, if there's no
 19 asbestos in here, why are you trying to develop a
 20 system to remove something that's not in the product?
 21 Or not in being milled.
 22 So this is important to show -- and we're going
 23 to be working on this to see if we can use this
 24 technology from that data to concentrate the
 25 chrysotile.

1 MR. CALFO: Your Honor, I move to strike. That
2 was complete speculation.
3 THE COURT: The jury will ignore the last two
4 sentences of the witness.
5 BY MR. SATTERLEY
6 Q. Dr. Longo, it says, "The use of citric acid in
7 the depression of chrysotile asbestos and other mineral
8 species has been developed at Windsor Minerals in
9 response to the potential need for a means to exclude
10 extremely low levels of these contaminants from the
11 finished product of the beneficiation process."
12 Correct?
13 A. Yes, sir.
14 Q. Is that what you're talking about with regards
15 to trying to remove asbestos from the product?
16 MR. CALFO: Your Honor, again, objection.
17 Calls for speculation on the part of this witness. No
18 foundation.
19 THE COURT: That -- that's overruled. He's
20 interpreting the document.
21 THE WITNESS: Yes, sir.
22 BY MR. SATTERLEY:
23 Q. It says, "The use of these systems is strongly
24 urged by this writer to provide the protection against
25 what are currently considered to be materials

1 presently" -- "presenting a severe health hazard and
2 are potentially present in all talc ores in use at this
3 time."
4 And it's signed off by Vernon Zeitz; correct?
5 A. That is correct.
6 Q. And health hazards is beyond your area of
7 expertise; correct?
8 A. Yes, sir, it is.
9 Q. And then if we flip over to Table 15 of this
10 1974 document.
11 And it says, "Asbestiform fibers counted by
12 Walter C. McCrone," and it's got "ore, product, ore,
13 product, ore, product."
14 And then it's got fiber identification,
15 "probably chrysotile, probably chrysotile," and the
16 fifth one down has got eight and it says "chrysotile,"
17 and the final one says "chrysotile"; correct?
18 A. Correct.
19 Q. Is this further documentary evidence of the
20 presence of asbestos, in your opinion, in the Vermont
21 ore and product?
22 MR. CALFO: Objection, Your Honor. No
23 foundation. Calls for speculation on the part of this
24 witness.
25 THE COURT: Overruled.

1 THE WITNESS: Yes, it does, especially at these
2 concentrations, because they're talking about counts
3 per EM grid. So these are the number of fibers found
4 on an individual grid at the detection limits that they
5 were using at the time, which were somewhat antiquated.
6 BY MR. SATTERLEY:
7 Q. Moving forward from 1974 to 1975, I would like
8 to present you with what's been admitted as
9 Exhibit 724, dated November the 5th, 1975, from Walter
10 McCrone -- from the McCrone laboratory, Gene Grieger,
11 to Vernon Zeitz.
12 Now, Vernon Zeitz, we saw his name on the last
13 document; right?
14 A. Yes, sir.
15 Q. And this one is -- is written to him from
16 McCrone -- from Gene Grieger, senior research physicist
17 at McCrone; correct?
18 A. That is correct.
19 Q. And does he document and report and have an
20 attachment regarding the presence of -- presence of
21 fibers or bundles with regards to the material they're
22 looking at?
23 A. That is correct. They do.
24 Q. It talks about Table 1 showing "actual fiber
25 counts and the approximate equivalent concentration in

1 parts per million of amphibole particles, which we
2 found in these samples.
3 "Some of them seem rather high. One had ten,
4 and one had nine amphiboles. Most of these come in
5 bundles of one, two, or three fibers, with anywhere
6 from two to five amphiboles in a bundle?"
7 Do you see that?
8 A. Yes, I do.
9 Q. Now -- and then there's a chart on the next
10 page; correct?
11 A. There is.
12 Q. And we see the references here to the
13 amphiboles found; right?
14 Oh, I'm sorry. "Fibers of asbestos found,"
15 correct, Dr. Longo?
16 A. That is correct.
17 Q. And some of these reference to "HC." Do you
18 see the -- the sample being HC?
19 A. I do.
20 Q. And based upon your review of the internal
21 documents, do you have an opinion as to what HC
22 represents?
23 MR. CALFO: Objection. Calls for speculation
24 from this witness. No foundation.
25 THE COURT: Mr. Satterley, you put a circle

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1 around one that's not on the same level even though --

2 MR. SATTERLEY: I'm sorry, Your Honor.

3 THE COURT: Your yellow marker mismarked it.

4 MR. SATTERLEY: I'm upside down. Which one?

5 THE COURT: It's the third one down. That one

6 is not an HC.

7 MR. SATTERLEY: Oh.

8 Oh, it is HC, Your Honor. There's two HCs

9 right beside each other.

10 THE COURT: All right.

11 MR. SATTERLEY: And both of those are HC.

12 THE COURT: Okay. I -- I stand corrected.

13 MR. SATTERLEY: I apologize, Your Honor. I was

14 trying to do it upside down.

15 THE COURT: All right. The objection is

16 overruled.

17 You may respond to the question.

18 BY MR. SATTERLEY:

19 Q. Do you have an opinion about HC and what that

20 represents based upon all the internal documents you've

21 looked at?

22 A. The H stands for Hammondsville, and the C

23 stands for cosmetic.

24 Q. In your opinion, Dr. Longo, is this another

25 instance of confirmed fibers of asbestos in the

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1 cosmetic talc back in 1975?

2 MR. CALFO: Objection. Calls for speculation.

3 No foundation for this witness.

4 THE COURT: That's overruled.

5 THE WITNESS: Yes, it does.

6 BY MR. SATTERLEY:

7 Q. Now, in your testing -- and we're going to get

8 to your testing in a little bit -- you have taken

9 photographs, you've done count sheets, you've done

10 selected area electron diffraction you've done

11 chemistry analysis, EDS; correct?

12 A. That is correct.

13 Q. And you've produced all -- or you've printed

14 all that out and made detailed reports of that and

15 turned it of to the attorneys for these companies;

16 correct?

17 A. That is correct.

18 Q. And in -- in your testing, in your analysis,

19 we're able to look at the actual photographs and the

20 length and the width of the various fibers you found;

21 correct?

22 A. That is correct.

23 Q. Okay. In -- in -- in many of these historical

24 testings -- not all of them, but in many of them -- do

25 we have that same advantage, to look at the

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1 photographs?

2 A. No, most of the time not. Very rare.

3 Q. All right. Do we have most of the underlying

4 raw data, being the chemistry, the selected area

5 electron diffraction, to analyze ourselves to see --

6 see what it says?

7 A. Sometimes you have the selected area electron

8 diffraction and occasionally a count sheet, but it's

9 mostly this type of information, where they just

10 say, "We found this."

11 Q. The next one is Exhibit 713.

12 MR. SATTERLEY: May I approach again,

13 Your Honor?

14 THE COURT: You may.

15 BY MR. SATTERLEY:

16 Q. This is 1977, going forward in time.

17 EMV Associates, you understand that to be a laboratory

18 that Johnson & Johnson sent materials to for analysis

19 on a few occasions?

20 A. Yes, sir.

21 Q. And is this analysis of nine talc samples that

22 you have read and considered in formulating your

23 opinions?

24 A. I have.

25 Q. And is this dated, Exhibit 713, April the 1st,

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1 1977?

2 A. That is correct.

3 Q. By the EMV Associates; correct?

4 A. Yes, sir.

5 Q. And do they have on this -- in this instance,

6 do they have pictures of -- of things we can look at,

7 the chemistry and the morphology of what's depicted

8 there?

9 A. Yes.

10 Q. And is there reference to composite?

11 Do you know what a composite is?

12 A. Composite typically means that you have mixed a

13 couple different sources into something. Say, for

14 example, you take a composite of maybe two different or

15 three different areas of the talc from a mine or -- and

16 make it all one composite so you can try to analyze

17 what's from these two or three different areas.

18 Q. And here, they say, with regards to --

19 Well, first of all, I've heard before

20 composites and blending. Do you know what blending --

21 blending of talc is?

22 A. Blending is -- can be the same thing, but

23 you're just mixing it all together. And typically,

24 blending and milling -- or blending, you're putting in

25 some of the other nontalc ingredients. Just depends on

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1 who was saying it.
2 Q. And it says, "Both large and small" -- "A
3 composite, both large and small fibrous tremolite
4 particles found. See Figure 4."

5 And then it says right below that, "Old stock
6 composite, one small fibrous tremolite particle was
7 found. See Figure 6."

8 Do you see that?

9 A. Yes, sir.

10 Q. So if we go over to Figure 4, that's what we
11 were looking at just a few minutes ago; right?

12 A. Yes.

13 Q. And then we've got -- Figure 6 here, we've got
14 more photographs from 1977 with the chemistry; right?

15 A. Yes, we do.

16 Q. If we zoom in on the top photo, "800X," does
17 that mean 800 magnification?

18 A. It does.

19 Q. And the jury heard last Thursday, when Mr. Poye
20 was here, the difference between talc, platy talc and
21 fibrous talc and fibers and asbestiform.

22 Are you able -- from this -- this 1977 photo,
23 are you able to determine, is this fibrous?

24 A. It meets the definition of a -- of fibrous,
25 yes, sir. It's got parallel sides, and it has an

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1 aspect ratio easily equal to or greater than 5 to 1.
2 That looks like an aspect ratio more than on the lines
3 of 20, 30, 40 to 1. And we are looking at a bundle.

4 Q. How do we know that's a bundle?

5 A. Well, a bundle is defined as either two or
6 three fibers parallel touching, and if you look closely
7 on the sides or the bottom, you can see what looks like
8 a splayed end coming off, and you can see individual
9 fibers, even from this xerox copy of -- of this
10 photomicrograph, is what we call them. That's a
11 bundle.

12 Q. And I want to use J&J's definition -- this is
13 Exhibit 430, which is into evidence -- on asbestos.
14 And this is a Johnson & Johnson document. The
15 definition here they have for asbestos, under the J4-1
16 and the TM7024 -- and we'll talk about those methods in
17 a little bit -- it says, "Asbestos is defined to be the
18 fibrous serpentine chrysotile and the fibrous form of
19 the amphibole group as represented by amosite,
20 anthophyllite, crocidolite, tremolite, and actinolite."

21 Is that your understanding of the definition of
22 asbestos?

23 A. Yes, sir, the fibrous form of it.

24 Q. And so if we -- if -- if we have a fibrous form
25 of serpentine, curved serpentine, would that

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1 definition -- would that meet the definition of
2 asbestos?

3 A. Yes, sir. Either curved or straight. But
4 typically, curved is seen in bulk samples, and every
5 now and then, you will see it in a TEM because of the
6 higher magnification and the smaller particles.

7 But that is a typical definition, fibrous forms
8 of these amphibole -- amphibole groups.

9 Q. Okay. So right here, back -- Ms. Clancy points
10 out -- where it says "fibrous tremolite" under the J&J
11 definition that we just read, does that fibrous
12 tremolite used in their definition equate to asbestos?

13 A. Yes, sir, it does.

14 Q. One other document, and then I'm going to
15 bounce back to heavy liquid for a minute.

16 Exhibit 726, are you familiar with Forensic
17 Analytical out of Hayward, California?

18 A. Yes, sir, I am.

19 Q. And a fellow named Mark Floyd?

20 A. Yes, sir. I know Mr. Floyd.

21 Q. Mr. Floyd, is he an analyst that identifies
22 asbestos in materials and has written in reports in
23 that regard for many years?

24 A. Many years. Doing it almost as long as me.

25 Q. And have -- in fact, have you analyzed or seen

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1 his reports with regards to the presence of asbestos in
2 talc?

3 A. Yes, sir, I have.

4 Q. And this into evidence as Exhibit 726. Does
5 this, Dr. Longo, document the presence of asbestos in
6 off-the-shelf Johnson's Baby Powder in 2004?

7 A. Yes, sir, it does.

8 Q. And is -- Mr. Floyd signs off on it right here?

9 A. Yes. That's his -- that's his initials.

10 MR. CALFO: Objection, Your Honor. There is no
11 foundation for this witness to testify about this.

12 MR. SATTERLEY: Let's zoom in.

13 THE COURT: That's overruled.

14 BY MR. SATTERLEY:

15 Q. Do you see Mr. Floyd -- Mark Floyd, his name
16 right there, Dr. Longo?

17 A. Yes, sir, I do.

18 Q. And with regards to this Johnson's Baby Powder
19 off the shelf, "AN" -- it says, "Asbestos type AN."
20 What type of asbestos was he reporting in 2004 on
21 Johnson's Baby Powder?

22 MR. CALFO: Objection. Calls for speculation
23 from this witness.

24 THE COURT: Overruled.

25 THE WITNESS: "AN" stands for anthophyllite.

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1 BY MR. SATTERLEY:

2 Q. And just to understand what has happened here,
3 you understand that this sample was sent to Mr. Floyd
4 by a television -- television station in Sacramento?

5 A. Yes, sir.

6 Q. And does this, in your view, Dr. Longo, add to
7 the -- all the other samples showing the presence of
8 asbestos in Johnson's Baby Powder in the '70s, '80s,
9 '90s, and -- and into the 2000s?

10 MR. CALFO: Objection. No foundation. Calls
11 for speculation from this witness.

12 THE COURT: That's overruled.

13 THE WITNESS: Yes, it does.

14 BY MR. SATTERLEY:

15 Q. Now, we've introduced lots of documents into
16 evidence, and I'm not going to go over all of them with
17 you, obviously, Dr. Longo.

18 But are there other instances in the historical
19 documents regarding Johnson's Baby Powder where
20 asbestos has been documented?

21 A. Yes, sir.

22 Q. Okay. And with regard to Cashmere Bouquet,
23 Colgate-Palmolive, have you also looked at the -- some
24 of the historical documents regarding the presence of
25 asbestos in -- in the Cashmere Bouquet product?

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1 A. Yes, I have.

2 Q. And I'm going to -- not going to go over very
3 many, but there are a few into evidence that I wanted
4 to ask you about.

5 By the way, do you have a whole binder full of
6 Colgate reliance? I think I -- it's on the -- right
7 next to the screen.

8 A. Yes, sir, I do.

9 Q. No. Up. Up.

10 A. I knew they were here somewhere.

11 Q. Okay. But do you have two binders? Are those
12 Cashmere Bouquet reliance materials?

13 A. They are.

14 Q. And do they document, going all the way back
15 into the late 1960s and the 1970s, the presence of
16 asbestos in Cashmere Bouquet?

17 MR. MULARCZYK: Objection. Hearsay. Vague.

18 THE COURT: It's vague. You may rephrase your
19 question.

20 BY MR. SATTERLEY:

21 Q. Okay. Are there many --

22 THE COURT: We don't do that Joe McCarthy
23 business of, "Do you have it in the satchel?"

24 MR. SATTERLEY: I understand. Yes, Your Honor.
25 Yes, Your Honor.

1 BY MR. SATTERLEY:

2 Q. Do you have reliance lists, Dr. Longo,
3 regarding identification of asbestos before you?

4 A. I do.

5 Q. All right. One of the reliance lists, does it
6 include documents -- this is going to be
7 Exhibit 3584 -- from McCrone to Joe Simko at
8 Colgate-Palmolive in 1974?

9 A. Yes, sir, it does.

10 Q. And we heard from the corporate representative
11 yesterday, Ms. Scala, Diana Scala --

12 THE COURT: Does that have a number on it?

13 MR. SATTERLEY: Yes. This is Exhibit 3584,
14 Your Honor.

15 BY MR. SATTERLEY:

16 Q. And this is February 5, 1974, regarding the
17 samples designated 516. And you considered this,
18 Dr. Longo; correct?

19 A. Yes, sir, I did.

20 Q. And did McCrone report back to Colgate in 1974
21 that all three samples had chrysotile asbestos in them?

22 A. Yes, sir, they did.

23 Q. And in this particular instance, was there
24 photographs taken -- photomicrographs taken -- Scala
25 Exhibit 18 -- this is Scala Exhibit Number -- were

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1 there photomicrographs of -- of the Cashmere Bouquet
2 Sample 516 by McCrone back in 1974?

3 A. Yes, sir.

4 Q. And what we've got displayed on the screen
5 here, based upon what McCrone reports in 1974 and based
6 upon your analysis of -- of -- of this report, do you
7 have an opinion whether this is documenting asbestos?

8 A. It shows what asbestos -- what chrysotile
9 asbestos would look like under the transmission
10 electron microscope.

11 Q. And you talked about both straight and curved.
12 Does it show some curved fibers?

13 A. Fibers and bundles, yes.

14 Q. Okay. And is this just one instance of the
15 identification of asbestos in the -- in the Colgate
16 product?

17 A. Yes, sir.

18 Q. And we know other photographs here -- let me
19 just -- too many papers here.

20 Dr. Longo, in 1974, does McCrone report back to
21 Colgate that it's a chrysotile fiber in the North
22 Carolina Regal sample?

23 A. Yes, they do.

24 Q. And when we get to your photographs in a little
25 bit, do you have photographs where you have materials

1 that look like -- is that platy talc at the top?

2 A. It's either platy talc or calcium carbonate or

3 one of the other accessory minerals. That's not

4 typically a talc look.

5 What's more like talc is at the top of the

6 chrysotile fiber. It's more of a plate shape, little

7 irregular plate shape. That, in my opinion, is what

8 the morphology of platy talc should look like.

9 Q. Is that, in your view, fiber?

10 A. Yes, sir. That meets all the current regulated

11 asbestos definitions by transmission electron

12 microscopy. It has parallel sides and has an aspect

13 ratio, the length divided by the width, of 5 to 1 or

14 greater. That's, oh, probably in the 20- to 30-to-1

15 range.

16 Q. The previous photograph here, does it say

17 "chrysotile fibers" here at the bottom?

18 A. Yes, sir, it does.

19 Q. And is that, in your opinion, a fiber,

20 Dr. Longo?

21 A. Yes, sir. That meets the definition. There

22 are counting rules for determining fibers of asbestos

23 or bundles. That's classic.

24 Q. Is -- is there, in this photograph, examples of

25 the talc or talc particles blocking part of the view of

1 fiber -- a chrysotile fiber?

2 A. Yes, sir. You can see at the top end of the

3 fiber, it looks like we have a talc -- very large talc

4 plate laying over it. Then you have some smaller talc

5 plates to the right of the fiber.

6 So that's a pretty heavily loaded sample, to

7 see that much in one area of the TEM. TEM grid.

8 Excuse me.

9 Q. Now, in regards to your opinions on historical

10 identification of asbestos in Cashmere Bouquet, other

11 than McCrone, are there other laboratories that have

12 likewise found asbestos in the Cashmere Bouquet

13 product?

14 A. Yes, sir.

15 Q. And have you included those in your reliance

16 materials?

17 A. I have.

18 Q. And who are some of the other laboratories?

19 MR. MULARCZYK: Objection. Hearsay.

20 THE COURT: Overruled.

21 THE WITNESS: Besides McCrone, you have -- oh,

22 god, I'm having a mental...

23 There's -- there's -- I'm sorry.

24 BY MR. SATTERLEY:

25 Q. Yeah, you've got your binders there.

1 A. Yeah, let me just look.

2 Q. It's not a memory test.

3 A. I'm trying to go off -- yeah, test -- memory

4 test.

5 Mt. Sinai. We have, you know, some of the FDA

6 work in the early years. Johns-Manville. Cyprus, I

7 believe, did some testing. So there was some others.

8 Q. Is -- did Johnson -- in your materials, did

9 Johnson & Johnson --

10 A. Johnson & Johnson, too. I'm sorry.

11 Q. And Fred Pooley, specifically?

12 A. Yes, sir.

13 Q. And Mark Floyd at Forensic Analytical, did --

14 does his lab at Hayward look at Cashmere Bouquet and

15 found asbestos?

16 A. I believe so.

17 Q. Now, heavy liquid separation. Historically,

18 you mentioned Dr. Pooley did heavy liquid separation

19 and found asbestos in talc; correct?

20 A. Correct.

21 Q. You mentioned that -- and we showed

22 documents -- at Dartmouth, Dr. Reynolds looked at

23 heavy liquid -- heavy liquid separation and found

24 asbestos in talc?

25 A. Correct.

1 Q. Have you reviewed the test, the test results --

2 excuse me -- the testimony of Dr. Alice Blount?

3 A. I have.

4 Q. And have you seen her published paper?

5 A. Yes, sir. In 1990, 1991, peer-reviewed

6 published paper doing the exact same thing.

7 Q. And using the heavy liquid separation, did

8 Dr. Blount report and publish upon asbestos in talc

9 products?

10 A. Yes, sir.

11 Q. And specifically into evidence is Exhibit 160,

12 is the letter from Dr. Blount to one of the attorneys

13 for Johnson & Johnson in 1998.

14 And have you considered this with regards to

15 Sample I?

16 A. Yes, sir, I have.

17 Q. And in 1998, this letter indicated that

18 Sample I was Vermont, Johnson & Johnson talc; correct?

19 A. Yes, sir. It was a Johnson & Johnson

20 off-the-shelf product. And in that time period, it

21 would have been from Vermont. 1989, 1990, the talc

22 source was Vermont during that time.

23 THE COURT: Mr. Satterley, I neglected to write

24 down the exhibit number. I don't know whether you said

25 it or not.

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1 MR. SATTERLEY: 160, Your Honor.
2 THE COURT: Thank you.
3 BY MR. SATTERLEY:
4 Q. And you understand that -- Dr. Blount to be a
5 geologist/mineralogist?
6 A. Yes, sir.
7 Q. And have you considered her, not only her
8 published work but her testimony and her handwritings
9 and her letters back in the '90s regarding her testing
10 of this product?
11 A. In her published paper.
12 Q. Okay. So we've got Dr. Pooley, Dr. Reynolds,
13 Dr. Blount, Lee Poye, and MAS, your lab. In all five
14 of those instances, when heavy liquid separation was
15 done with regards to looking for asbestos in cosmetic
16 talc products, were asbestos identified?
17 MR. CALFO: Objection, Your Honor. There is no
18 foundation for -- for all those.
19 THE COURT: It's overruled.
20 THE WITNESS: Yes, sir. Asbestos was
21 identified using the heavy liquid density separation
22 method, both the protocol, or the method, for TEM as
23 well as PLM, where we actually used the Blount method
24 that she published in 1990.
25 BY MR. SATTERLEY:

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1 Q. Now, in all the materials you reviewed, have
2 you seen, since the Blount publication -- since the --
3 in -- in the early 1990s -- have you seen Johnson &
4 Johnson testing where they tested their talc by heavy
5 liquid separation at any time in the last 28 years,
6 since that paper was published?
7 A. No, sir, I've never seen any documents saying
8 that they were using...
9 Q. At any point in time, have you seen any
10 documents that Colgate-Palmolive or any of their
11 analysts tested their talc by using the heavy liquid
12 separation method?
13 A. No, sir.
14 Q. Now I want to talk about negative tests.
15 You mentioned limitations of XRD. Tell us your
16 opinion about reports regarding XRT -- XRD that report
17 nondetect, from an analytical standpoint, for the
18 identification of asbestos in talc. What does that
19 mean to you?
20 A. It means that the concentration of asbestos, if
21 present, wasn't greater than the detection limit,
22 which, for XRD, is pretty high, depending on what
23 you're looking at.
24 So your detection limit in XRD is probably -- a
25 really good XRD with good technicians may be for

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1 tremolite .2, .3 percent by weight. Today, you may get
2 down to .1. But in the '70s, it was around .4, .5.
3 Anthophyllite is even higher, and so is
4 chrysotile.
5 So using XRD and getting a negative in XRD only
6 tells you is -- there's not a -- really a lot of
7 asbestos in here, and that's it.
8 Q. With regards to the use of XRD, have you
9 studied the -- what's called the J4-1 method?
10 A. Yes, sir.
11 Q. And is it your understanding that the J4-1
12 method was a method adopted by industry -- the
13 Cosmetics, Toiletries and Fragrances Association -- in
14 1976?
15 A. Yes, sir, it was.
16 Q. And did the J4-1 method have the x-ray
17 diffraction as the first step in the process?
18 A. They did.
19 Q. And did J4-1 method -- did the J4-1 method ever
20 include a TEM analysis?
21 A. No, sir.
22 Q. Did the J4-1 method ever include heavy liquid
23 separation?
24 A. It did not.
25 Q. Did the J4-1 method have a stop, you stop

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1 analyzing, if you don't find anything by x-ray
2 diffraction or optical microscope?
3 A. I'm sorry. Could you repeat that?
4 Q. Sure. Let me just show you what's already into
5 evidence. It's 727.
6 This is the -- this is the J4-1 -- the actual
7 J4-1 method into evidence. It says "J4-1" over here.
8 Over here.
9 A. Yes, sir. I'm familiar --
10 Q. You recognize that, sir?
11 A. I'm familiar with this document.
12 Q. Okay. And at the bottom, it's got, "x-ray
13 diffraction" here, "acid leach" over here, "optical
14 microscopy," and then "fibrous morphology," and "stop.
15 Stop. Stop."
16 Do you see that?
17 A. Yes, sir.
18 Q. All right. So your understanding of the way
19 the J4-1 method works is, if you don't find anything in
20 the --
21 A. X-ray diffraction.
22 Q. -- x-ray diffraction showing amphibole, you
23 stop; correct?
24 A. Correct.
25 Q. Okay. So -- but if you do find a peak, then

1 you would go over to the optical microscopy and look
2 for fibrous materials; correct?
3 **A. Correct.**
4 **Q.** And if you don't find anything, you stop?
5 **A. Correct.** Well, if you do find, you stop. It
6 says, "Asbestiform amphiboles present." If you don't
7 find it, it's stop to the right, which says
8 "Asbestiform amphiboles absent."

9 That's -- so it was "as soon as you find a
10 negative test, you stop" type of protocol.

11 **Q.** Based upon analytical techniques and what was
12 known, do you have an opinion whether or not this was
13 an appropriate technique for the already -- the
14 identification of asbestos?

15 **MR. CALFO:** Objection, Your Honor. This
16 witness had no knowledge of what was known in the '70s.

17 **THE COURT:** That's overruled. He may opine.
18 You can cross-examine him about it.

19 **THE WITNESS:** It's an appropriate method to
20 find out information, but you have to be very careful
21 with it, if you understand the detection limits. There
22 is products out there that has enough asbestos in it
23 that it's fine.

24 But when you're dealing with cosmetic talcs and
25 you're dealing with trace levels, the XRD method is --

1 should be done with -- very carefully.
2 Today, it's -- I don't think it's worthwhile to
3 analyze by XRD at all for Italian and Vermont talcs.
4 It doesn't give you -- even if it's positive, you can't
5 determine if it's fibrous or not because it doesn't
6 give you morphology. So why do it?
7 **BY MR. SATTERLEY:**

8 **Q.** Exhibit 171 is the CTFA minutes, 1977. And it
9 says, with regards to the J4-1 method --

10 First of all, just -- you -- you've looked --
11 you reviewed the CTFA minute meetings; correct?

12 **A. Yes, sir, I have.**

13 **Q.** It says, with regard to the J4-1, "Test and
14 verify CTFA Method J4-1 for this purpose: Assurance
15 that method is accurate, reliable, and practical. He
16 reported" -- "He then reported these objectives have
17 not yet been achieved."

18 And it's reported in 1977 that six out of the
19 seven labs failed to identify spiked talc with
20 asbestos; correct?

21 **A. With tremolite.**

22 **Q.** And from an analytical standpoint, does this
23 demonstrate the inadequacies or the weaknesses of the
24 XRD method?

25 **MR. CALFO:** Objection, Your Honor. Calls for

1 speculation on the part of this witness.

2 **THE COURT:** Overruled.

3 **THE WITNESS:** Yes. It has -- it has detection
4 elements. So if you do a spiked sample and you can't
5 find it, then how can -- for this particular asbestos,
6 how can you find it in an unknown sample?

7 It's -- it's just not a very good method for
8 these types of analysis of cosmetic talc. Even today,
9 with state-of-the-art equipment, the concentrations
10 that are typically present are going to be lower than
11 what the XRD can see.

12 And couple that with the fact you can't tell if
13 it's fibrous or not, is -- is an issue.

14 **BY MR. SATTERLEY:**

15 **Q.** And it's referring to a "Dr. Schelz,"
16 S-c-h-e-l-z, "then proposed a round-robin partial
17 retest."

18 Do you see that?

19 **A. Yes, sir.**

20 **Q.** And then I'd like to show you what's into
21 evidence and what you considered, 233. This is
22 Johnson & Johnson document, March 1, 1978, to Charles
23 Haynes at the Cosmetics, Toiletry and Fragrance
24 Association.

25 And it's talking about the -- "I'm enclosing a

1 table which breaks the code for the recently completed
2 CTFA task force on round-robin testing of the consumer
3 talcum products for asbestiform amphibole minerals."

4 Do you see that?

5 **A. Yes, sir, I do.**

6 **Q.** It says, "The names and addresses and phone
7 numbers are also included for those individuals who
8 participated whose products were involved."

9 Do you see that?

10 **A. Yes, I do.**

11 **Q.** And he -- he writes in this confidential 1978
12 memo, which is Exhibit 233, "Please contact me" -- and
13 there's a phone number -- "upon receipt of this letter
14 so that I may destroy the only other copy of this
15 table, which is in my possession."

16 Have you ever seen, Dr. Longo, the table that
17 would break the code regarding the round-robin?

18 **A. No, sir.**

19 **Q.** It says on the second -- on this Johnson &
20 Johnson letterhead, second page, "Destroy your copy of
21 the table. Your participation in the final important
22 phase of the round-robin is appreciated. Thank you
23 very much.

24 "Sincerely, John P. Schelz, Chairman, CTFA task
25 force on round-robin testing of consumer talcum

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1 products."
2 Do you see that?
3 **A. Yes, I do.**
4 **Q.** And he carbon copies the vice-president of
5 science of the CTFA, Dr. Estrin; right?
6 **A. Yes, sir.**
7 **Q.** And also someone from the Bristol-Myers
8 Products Company; correct?
9 **A. That is correct.**
10 **Q.** And on the last document, Ms. Clancy points out
11 that John Schelz is identified as the chairman of the
12 CTFA task force.
13 Do you see that?
14 **A. I do.**
15 **Q.** Now, you've seen and evaluated many documents
16 from Johnson & Johnson, or their consultants, where it
17 says "nondetect."
18 Have you --
19 **A. I have.**
20 **Q.** -- not?
21 **A. Yes, sir, I have.**
22 **Q.** And have you identified and seen many documents
23 where it says they're looking for asbestos and they're
24 saying "nonquantifiable"?
25 **A. I have.**

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1 **Q.** How can -- if you are of the opinion that
2 there's asbestos in these cosmetic talc products, how
3 can that possibly be when there are so many documents
4 that say "nondetect"?
5 **MR. MULARCZYK:** Calls for speculation.
6 **MR. CALFO:** It calls for speculation from this
7 witness.
8 **THE COURT:** That's overruled.
9 **THE WITNESS:** It's all about the sample
10 preparation and detection limit, the reason you would
11 have a nondetect. And there is a lot of nondetect
12 analysis by TEM for Johnson & Johnson. But it's all
13 about the detection limit.
14 If you set -- if you have a detection limit
15 that is higher than most, anytime that others,
16 including me, have found asbestos in the product, then
17 it's not surprising. If your method is not sensitive
18 enough, you're not going to detect it. You have to
19 have -- if your detection limit is up here but your
20 asbestos level is down here -- and think of a line,
21 can't find it if it goes below this detection limit --
22 and it's down here, you're going to have negative after
23 negative after negative. When you do find it, you've
24 hit those one or two samples that has a very high
25 concentration of asbestos in it.

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1 It's all about the sample preparation and how
2 you do the analysis. If you can have a really
3 sensitive method or not.
4 **Q.** You talked about the tools you use. As a
5 demonstrative, I have two tools. I've got a bathroom
6 scale that I got at Walgreen's.
7 Do you see it says "Walgreens" on it there?
8 **A. Yes.**
9 **Q.** And I've got this type of scale, which -- what
10 do you call this type of scale?
11 **A. I would call that a jeweler scale.**
12 **Q.** And if we --
13 **A. A not -- a "not very sensitive one" jeweler**
14 **scale. But it should work for what you're doing.**
15 **Q.** So, for example, in thinking about detection
16 limit, if we have this -- and I've got a half-full box
17 of paperclips -- and we put it on the scale, the
18 bathroom scale I got at Walgreen, does it detect
19 anything?
20 **A. No. It's not -- it doesn't have a sensitive**
21 **detection limit.**
22 Now, you would -- not looking what's there, you
23 didn't know that, you would report that there's nothing
24 there. There's nothing on the scale. But that doesn't
25 make that half a box of paperclips disappear. So you

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1 can't say there's nothing there unless you know what
2 your detection limit is, et cetera. It's all about the
3 sample prep.
4 **Q.** This one I don't know how to use.
5 **A. Don't forget -- don't forget the tear button.**
6 **Q.** Okay. So let's move this off here. And put
7 this on.
8 **MS. CLANCY:** True it.
9 **BY MR. SATTERLEY:**
10 **Q.** True it.
11 All right. Let's see what happens here.
12 Now, this scale is more sensitive. Does it
13 detect and pick up the same paperclips that we couldn't
14 pick up with the bathroom scale?
15 **A. Yes, sir. It's more sensitive, so now you have**
16 **a scale that has a better, more sensitive detection**
17 **limit. And that's what we have done and others have**
18 **done using this concentration method to increase the**
19 **sensitivity.**
20 **Q.** Now -- so the two expressions, or the two --
21 does "ND," does that stand for nondetect?
22 **A. Correct.**
23 **Q.** Like you -- there's many reports that say
24 nondetect with regard to samples; correct?
25 **A. Correct. When they did the analysis, they did**

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1 not detect any asbestos. So they put in, you know, ND.
2 Q. And then there's NQ.
3 What does "NQ" represent?
4 A. In these tests, because you don't see this very
5 often at all, NQ would mean nonquantifiable.
6 Q. And are you familiar with the test method
7 written by Johnson & Johnson called 7024, TM7024?
8 A. Yes.
9 Q. And have you analyzed in great detail the Test
10 Method 7024?
11 A. Yes, sir, I have. It's a TEM method.
12 Q. And the 7024 method for the identification of
13 asbestos, in your opinion, does it have limitations?
14 A. Yes, sir, it does.
15 Q. And what limitations does the TM7024 have?
16 A. Well, you start off with the biggest one. It
17 doesn't use the heavy concentration method to prepare
18 the sample.
19 So you have to dilute the sample, say -- again,
20 we'll go back to the 30 or 40 milligrams.
21 50 milligrams talc. In order to make it where you can
22 get it on these little TEM grids, you may have to
23 dilute that a thousand times.
24 So you start off with that. The second problem
25 with it is that it uses this "got to find five fibers."

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1 And because you dilute it so much, it doesn't allow
2 you -- let me go back before that.
3 It doesn't allow you to expand the area you're
4 looking at.
5 So, if we're in this courtroom and we're
6 looking for our -- you got a -- a good example of this:
7 You got an acre of grass, high grass, and somebody asks
8 you, can you go find the ten golf balls that might be
9 out there? But we're only going to let you look at
10 this little area over here and see if you find
11 anything.
12 Well, that's what happens with this method.
13 You're looking at these little TEM grids and it doesn't
14 allow you to expand the area to keep looking to see if
15 you can get a better sensitivity.
16 So, if I'm only allowed to look at a little
17 area of that one acre versus walking around the whole
18 acre, which -- which one of those tests have I -- have
19 a better chance to run into those golf balls?
20 And that's the second problem with this. They
21 give you a time limit to how long you can spend doing
22 the analysis.
23 Q. Well, let me -- let me -- so time limit.
24 But let me go back to this.
25 You said five fiber requirement?

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1 A. Of any one type of asbestos.
2 Q. Explain that.
3 A. Well, if I analyzed the sample, with all the
4 limitations it has on it, and I find four tremolite
5 fibers, they will say that is nonquantifiable because
6 you have to find five to make it, quote, above
7 background.
8 Not even -- to me, it even makes it a little
9 bit worse. If you find four tremolite asbestos fibers
10 and four actinolite asbestos fibers -- now, those two
11 are related; a little bit more iron in the tremolite
12 chemistry will give you actinolite -- you still say
13 it's nonquantifiable because you didn't have five
14 actinolite and five tremolite or more. Now, say you
15 have four tremolite, four actinolite, and four
16 anthophyllite asbestos. It's still nonquantifiable
17 because you don't have five of each.
18 So, instead of just going, okay, here's what it
19 is, we found these five, this is the concentration, but
20 we don't believe it's above background, even though
21 there is no background of this, that would be a way to
22 at least give you the information and make a decision,
23 but the reports just say nonquantifiable.
24 Q. And have you seen instances where an analyst at
25 McCrone named Kent Sprague writes letters regarding

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1 analysis of talc and says, there's no asbestiform
2 minerals there, but we see the backup sheet and the
3 backup data and we see, in fact, that there was
4 asbestos present?
5 A. Yes, sir.
6 Q. This is Exhibit 174, which is into evidence.
7 And, for example, this letter right here, Exhibit 174,
8 is dated 1990. And Kent Sprague reports no
9 quantifiable asbestiform minerals; right?
10 A. Yes, sir.
11 Q. All right. And in this instance, we have some
12 of the backup data. A count sheet. And by the way, in
13 most of the reports where it says nonquantifiable, do
14 we have the backup data?
15 A. No. Just about all of them we do not.
16 Q. There's only a few examples of the backup data,
17 the count sheets like we've got here?
18 A. Yes, sir.
19 Q. All right. In this backup data, does it
20 demonstrate anthophyllite present?
21 A. It does.
22 Q. And does it give the length and the width?
23 A. Yes. The length is 20 and a width is 1.5,
24 which is probably more likely than that a bundle. And
25 if you divide 20 by 1.5, you would have an aspect ratio

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1 of about 7 and a half to 1.
2 Q. And in -- would that -- does that meet the
3 definition, anthophyllite, of regulated asbestos?
4 A. Yes, sir. It meets that definition as well as
5 the aspect ratio definition of the 7024 method.
6 Q. And so is this an example of, if you just rely
7 upon the report that says no quantifiable asbestos and
8 don't have the backup data, you would be misled into
9 believing there's no asbestos present?
10 MR. CALFO: Objection. Calls for speculation
11 on the part of this witness.
12 THE COURT: That's overruled.
13 THE WITNESS: Yes, sir. It would be very
14 unclear what that -- for somebody like me very unclear
15 what that means, nonquantifiable. It's either you can
16 count it or you -- or it's not there and you don't.
17 BY MR. SATTERLEY:
18 Q. And in this specific sample also -- we go a
19 couple pages over. Chrysotile. The structure is a
20 fiber. Type is chrysotile. And the length and the
21 width. And it says SAED -- SAED and EDS checked off
22 yes; right?
23 A. Yes, sir.
24 So, again, it's chrysotile asbestos and it --
25 they have all the right boxes checked for it to be

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1 asbestos.
2 Q. And the next page -- and, in fact, at the
3 bottom of the next page it says "chrysotile fiber";
4 correct?
5 A. Yes, sir.
6 Q. All right. So in this one -- in this one
7 letter where it says no asbestiform by McCrone, the
8 McCrone Group, no quantifiable amounts of asbestiform,
9 we have two instances of asbestos, chrysotile asbestos
10 fiber and anthophyllite asbestos fiber; correct?
11 A. That is correct.
12 Q. That's Exhibit 174.
13 Now, the -- back to the method. The 7024.
14 It's into evidence as Exhibit 172. It's the actual
15 J&J Method 7024.
16 You've read this in detail; correct?
17 A. I have.
18 Q. And this is a J&J method specification;
19 correct?
20 A. Yes, sir, it is.
21 Q. Background correction. Now, what is that?
22 A. Background correction is that there is stray
23 asbestos fibers floating around in the air that somehow
24 gets on the sample and could confound the results. Or
25 that your laboratory you're using or your lab you've

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1 got cross-contamination because you've got some stray
2 asbestos fibers getting in with the analysis.
3 So they call it background correction.
4 Q. And in the protocol and specification, what
5 does J&J say about background correction? Says it has
6 not been necessary. How is that significant or
7 important?
8 A. Well, it's significant because it verifies the
9 same thing we say. For these types of asbestos,
10 tremolite, actinolite, anthophyllite -- you do not have
11 background levels of this material. It's not used
12 in -- in very few asbestos products. Labs don't
13 typically have that poor of laboratory use that they
14 will cross-contaminate. So there's no such thing as
15 a -- ambiguous background level. Asbestos fibers are
16 heavier than air. They do not stay in the air for
17 eternity. They fall out, obeying the basic laws of
18 gravity. You don't have this, quote, background
19 causing contamination levels that somehow interfere in
20 your analysis. And I agree with that. We have seen no
21 background contamination in any of the processed
22 blanks, any of the QCs that we've done on any of these
23 samples. The filters doing the exact same type of
24 analysis are clean, so, therefore, below detection
25 limit of the analysis.

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1 Q. So you're running blanks to make sure you don't
2 have contamination in the lab?
3 A. Correct. Blanks. Processed blanks where you
4 do the exact same thing you did to the sample you're
5 analyzing, except you don't put talc in it: heavy
6 liquid, centrifuge, the whole thing. And we analyze
7 the exact same area.
8 Q. So with J&J, when they say, "Background
9 contamination" -- "Background correction has not been
10 necessary, the amount of background asbestos detected
11 has been insignificant in comparison to the levels of
12 asbestos found in contaminated samples," do you agree
13 with that?
14 A. I agree that it's been insignificant. It's --
15 essentially, in our lab and others, it doesn't exist.
16 So it does not interfere with the analysis. So when
17 you find a single fiber or a single bundle in the
18 analysis of tremolite, actinolite, anthophyllite, it is
19 significant. It shows that that came from the cosmetic
20 talc itself and not from some stray contamination out
21 of the lab, in the air from somewhere, what -- whatever
22 it may be.
23 Q. Last question before lunch.
24 MR. SATTERLEY: Can I get one more question in,
25 Your Honor.

1 THE COURT: I was going to cut you off right
2 there.

3 MR. SATTERLEY: I saw you were going to cut me
4 off.

5 THE COURT: I was going to. One important
6 question.

7 BY MR. SATTERLEY:

8 Q. It's preparation and analysis time.
9 Preparation time per sample, including preparation of
10 related materials is one hour.

11 In your opinion, Dr. Longo, is that reasonable?

12 A. Not for what we do on the heavy liquid
13 separation, on the preparation, one hour. We don't --
14 we don't give time limits to our scientists at the
15 laboratory to either prepare a sample or to analyze the
16 sample. Their only requirement is to do it right.

17 MR. SATTERLEY: Now would be a good time for
18 lunch, Your Honor.

19 THE COURT: Ladies and gentlemen. We are going
20 to go to lunch and come back at 1:30.

21 Remember the admonition that it is your duty as
22 jurors not to converse amongst yourselves or with
23 anyone else on any subject connected with the trial or
24 to form or express any opinion thereon until the matter
25 is submitted to you.

1 Enjoy your lunch. See you back in an hour and
2 a half.

3 (Whereupon, the jury having exited the
4 courtroom, the following proceedings were held:)

5 THE COURT: The record will reflect that the
6 jurors have departed the courtroom.

7 Is there anything you need to talk about?

8 MR. SATTERLEY: Not from the plaintiff's
9 perspective, Your Honor.

10 MR. CALFO: No, Your Honor.

11 MR. MULARCZYK: No, Your Honor, thank you.

12 THE COURT: All right. I will see you at 1:30.

13 THE WITNESS: Thank you, Your Honor.

14 (Lunch break taken.)
15 (Afternoon Session)

16 (Whereupon, the following proceedings were held
17 outside the presence of the jury:)

18 THE COURT: All right. We're back in session.
19 Is everybody here?

20 Okay. All counsel are here, it appears.

21 Ms. Hill, please bring in the jury.

22 (Whereupon, the jury having entered the
23 courtroom, the following proceedings were held:)

24 THE COURT: Good afternoon, ladies and
25 gentlemen. The record reflect will that the jurors are

1 all in their preassigned seats, counsel is at counsel
2 table, and Mr. Longo is back in the witness box.

3 You will recall you're still under oath?

4 THE WITNESS: Yes, Your Honor.

5 THE COURT: Mr. Satterley, you may continue
6 with your direct examination of this witness.

7 MR. SATTERLEY: Good afternoon, Dr. Longo.
8 Good afternoon, everyone.

9 THE WITNESS: Good afternoon.

10 BY MR. SATTERLEY:

11 Q. We left off talking about the Johnson & Johnson
12 TM7024 and the -- where we were talking about the
13 preparation and analysis time. I read to you,
14 "Preparation time per sample, including preparation of
15 related materials, is one hour."

16 How long does the prep time take in your lab
17 for heavy liquid separation analysis?

18 A. Probably two hours. Two to three hours to do
19 multiple samples.

20 Q. It says, under this J&J method, TM7024.
21 "Analysis search time." Search time. Does that mean
22 looking under the microscope looking for the asbestos
23 fibers or bundles?

24 A. Yes, sir.

25 Q. It says, "The search time per sample is a

1 maximum of two hours."

2 Correct?

3 A. That's what it states.

4 Q. And, from an analytical point of view, you
5 believe it's appropriate, or -- is it even possible to
6 find 20 different asbestos fibers or bundles in a
7 two-hour time frame?

8 A. No. That would be impossible.

9 Q. Is it appropriate, in your view, to put an
10 arbitrary time limit like two hours for searching for
11 asbestos in a sample?

12 A. No. Because, to me, that puts pressure on the
13 microscopist to get done. It's more preferable to let
14 the microscopist take the time he needs till he feels
15 satisfied that he has an adequate search and/or
16 adequate analysis. A sample that may have 15 or 20
17 asbestos fibers in it, it'd probably take two full
18 days.

19 Q. Also on the Exhibit 172, under Section 13,
20 there is a -- I got this one highlighted. This is
21 still 172. Page 7. I'm going to figure this thing out
22 eventually.

23 Under definition of fiber: It says, "An
24 elongated particle with parallel sides and an aspect
25 ratio K" -- oh, "greater than 3 to 1."

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1 Do you see that?

2 A. Yes, sir.

3 Q. Is it your understanding that's Johnson &

4 Johnson's definition of a fiber, that's greater than

5 3 to 1?

6 A. Yes, sir.

7 Q. And in some of the regulatory definitions, does

8 regulatory -- some of the regulatory definitions

9 describe a fiber as being greater than 3 to 1?

10 A. Well, that's greater than or equal to 3 to 1.

11 Some of the OSHA documents for fibers are greater

12 than -- greater than or equal to 3 to 1. So that

13 follows along the Federal Government on occupational

14 exposure for sizes of the fiber -- for the aspect ratio

15 of the fibers.

16 Q. And it says, "The definition employed may vary

17 with the needs of the client."

18 Do you see that?

19 A. Yes.

20 Q. Have you seen in any of the regulatory

21 framework -- whether it be OSHA, EPA, ISO -- that the

22 definition of what a fiber is needs to vary depending

23 upon who the client is or what the client needs?

24 A. No. There's two definitions of fibers on

25 aspect ratios. One is greater than or equal to 3 to 1

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1 for occupational exposure analysis and the other one is

2 the standard TEM analysis where it's greater than or

3 equal to 5 to 1 aspect ratio. Those are the only two

4 aspect ratios that I know of for optical microscopy or

5 transmission electron microscopy.

6 Q. This 7024, this method that we've been talking

7 about, is this generally accepted in the scientific

8 organizations as a proper way to analyze samples for

9 the presence of asbestos?

10 A. It's not in any of the standard protocols.

11 Using this type of method it has evolved since then.

12 And it's -- you know, in order to be fair, there's been

13 this running debate, is it McCrone's method or is it

14 J&J's method, depending on who you ask.

15 Q. The -- let's switch gears now and take this to

16 the side, and let's go to -- let's go to testing and

17 testing results.

18 What is the NIST or the NIST standard?

19 A. That is the National Institute of Standard and

20 Technology, and all laboratories that are certified or

21 doing this work should have a NIST standard for all the

22 regulated asbestos. They sell you a bottle of

23 tremolite asbestos that's certified by the National

24 Institutes of Standard and Technology, and a bottle of

25 anthophyllite, chrysotile, amosite, crocidolite. And

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1 it's a requirement to have these standards in your lab

2 for your certifications.

3 MR. SATTERLEY: May I approach, Your Honor?

4 THE COURT: You may.

5 BY MR. SATTERLEY:

6 Q. This is marked for identification purposes only

7 as 1046. Is this a NIST standard of tremolite asbestos

8 that your laboratory has and photographs were taken by

9 your laboratory?

10 A. Yes. This is our NIST standard for tremolite

11 and those are our photographs.

12 Q. And we're going to display now the 1046. And

13 it's hard to see. But does it say "1867 bulk asbestos

14 uncommon" and then identifies tremolite?

15 A. Yes.

16 Q. And did your laboratory take the NIST standard,

17 put it under the TEM, and take photographs of it so

18 that we could see what the standard tremolite asbestos,

19 according to the National Institute of Standards and

20 Technology, what it looks like?

21 A. Yes.

22 Q. If we go to the second page of 1046, do the

23 photographs reflect -- reflected here represent

24 tremolite that your laboratory took from the tremolite

25 standard of the National Institute of Standards and

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1 Technology?

2 A. Yes. Those are two asbestos tremolite

3 structures on the left-hand side, and on the right-hand

4 side is the corresponding chemistry for the --

5 essentially the pattern that tremolite has for the one

6 on the very -- the very tall one is silicon and then --

7 Q. This right here?

8 A. Yes.

9 And then magnesium and then calcium.

10 Q. This?

11 A. And then sometimes a little iron to the further

12 on the right.

13 Then that really big peak all the way to the

14 right is copper, because it's on a copper grid.

15 Q. That's the grid itself?

16 A. Correct.

17 Q. And you said iron. Is this a little iron peak

18 there?

19 A. Yeah. Sometimes it's there, sometimes it's

20 not.

21 Q. And this right here, that I put my -- that's

22 the calcium?

23 A. Correct.

24 Q. And is that calcium distinguish tremolite from

25 anthophyllite or talc?

1 A. It does.

2 Q. If you had no calcium there and you had this

3 pattern, would that be consistent with anthophyllite?

4 A. It would be -- yes. It would be close to

5 anthophyllite or fibrous talc.

6 Q. And is fibrous talc and anthophyllite

7 chemistry, the chemistry of it, substantially similar?

8 A. It is.

9 Q. And by the way, the photographs that we're

10 seeing here on this NIST standard, is this a -- a

11 fiber?

12 A. No. The -- both those, in my opinion, based on

13 the photographs, are bundles of fibers.

14 Q. And what is it about the photograph, the

15 appearance, that represents it as a bundle of fibers?

16 A. Well, it's kind of hard to see from this far

17 back, but on the bottom right-hand end, you'll see what

18 looks like almost little protrusions sticking out of

19 the bottom. If you can then see this under the

20 microscope, you can see the striations that these are

21 individual fibers all packed together. And that's the

22 definition of a bundle: parallel fibers that are

23 touching, not spread apart.

24 And the top one the same thing. This one's a

25 little different in that you can see one, two, three,

1 four, five, six, a number of individual fibers, and you

2 have one long one on the top right-hand side.

3 So these would be two bundles of tremolite

4 asbestos.

5 Q. And then the last page, on the NIST standard,

6 does it show the diffraction pattern or the selected

7 area electron diffraction image?

8 A. Yes.

9 Q. And we heard from Mr. Poye about this the other

10 day. But can you just remind us again. What are we

11 seeing in here and how do we know this is an amphibole

12 or asbestos based upon this diffraction pattern?

13 A. Well, nobody -- at least we don't -- just base

14 something on a diffraction pattern. We look at three

15 things: The morphology. Is it fibrous? Does it meet

16 the definition? Very important, the microchemistry.

17 Does it have a tremolite chemistry, the right ratios of

18 magnesium, the calcium, and the one tall silicon peak?

19 And does it have an amphibole-type d-spacing -- that's

20 the -- that's the distance between the row of atoms --

21 that are consistent with tremolite?

22 So it's not just one thing. Everything goes

23 through a series of diagnostic tests. You know, A,

24 yes. It has the right morphology. It's fibrous.

25 Check.

1 Second, the chemistry. Does the chemistry

2 match? And tremolite is very distinct. Check.

3 Does it have an amphibole diffraction spacing

4 between the atoms that are in the range of what you

5 would expect for tremolite which are off standard x-ray

6 cards for x-ray diffraction? Check.

7 And there it is.

8 You can't -- you just can't rely on one thing.

9 You put it all together and it says, yes, by all the

10 standards, this is tremolite asbestos.

11 Q. Now, if somebody were to say, Dr. Longo, wait a

12 second, you didn't measure the space and do what's

13 called a zone-axis measurement of this, so how can you

14 possibly know that's an amphibole pattern, because you

15 didn't measure it? Is that a fair criticism, in your

16 view?

17 A. Absolutely not.

18 Q. And why -- why do you say that?

19 A. You don't need a zone-axis diffraction pattern.

20 If all's you had was a diffraction pattern and no

21 chemistry to go along with it, then, yes, you need to

22 do at least one zone-axis diffraction, and you have --

23 and that's how microscopists would have done it in the

24 '70s and early '80s before EDXA or the microchemistry

25 got so good, for lack of a better word. So you don't

1 need that. It's not required in any of the standard

2 protocols to do that.

3 Q. Did George Yamate, years ago, 30 years ago,

4 suggest zone-axis measurements?

5 A. George Yamate said for EPA Level 3, and if it's

6 going to be a -- if it's going to be a legal case, you

7 need to do zone -- you need to do a couple zone-axis

8 diffraction patterns to verify.

9 Q. Now, I'm going to switch gears back to -- away

10 from the standard to the -- your testing, actually.

11 Do you -- do you employ the methods for the

12 identification of asbestos that have been recognized,

13 the International Standard Organization methods, the

14 other methods, for the proper identification of

15 asbestos?

16 A. Yes.

17 Q. And have -- did you employ -- you and your lab

18 employed those clearly-defined methods in the

19 identification, in the characterization of asbestos in

20 talc?

21 A. Yes, we did.

22 Q. Anywhere, in any of the methods that you

23 examined for the identification of asbestos in talc, is

24 there a requirement that you do what's called a, quote,

25 backscatter analysis?

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1 A. No.
2 Q. If somebody were to come to this courtroom and
3 say, I'm state of the art, I use backscatter analysis
4 and I can determine there's no asbestos here because
5 the backscatter analysis that I use, is that in any
6 method whatsoever for the identification of asbestos?
7 A. No. That would not be, in my opinion, a -- a
8 method used to identify different types of asbestos.
9 That was not -- backscatter detectors and transmission
10 electron microscopes were never designed to do
11 irregular surfaces like asbestos fibers. It has to
12 be -- we did it in graduate school. It has to be a
13 polished surface so you can see all the different
14 orientations of the crystal. If it's round like
15 asbestos fiber or bundle, it is very difficult to
16 identify without numerous standards, and that's even in
17 the published papers about that.
18 So it's not recognized in any -- any agency as
19 a method for the identification of asbestos.
20 Q. So let's -- let's jump right into the -- these
21 books. You have binders over -- box -- two boxes of
22 binders next to you, do you not, Doctor?
23 A. Yes, sir.
24 Q. And within the -- the binders -- and these are
25 already admitted into evidence.

1 go ahead.
2 THE WITNESS: Yes, yes, yes, and yes.
3 BY MR. SATTERLEY:
4 Q. Let me break it down.
5 A couple years ago, did I provide you three
6 samples?
7 A. Yes.
8 Q. Did I provide an affidavit from a collector?
9 A. Yes.
10 Q. Did you analyze those three samples that I
11 provided to you a couple years ago?
12 A. Yes.
13 Q. Did other attorneys from other law firms
14 provide you samples?
15 A. Yes.
16 Q. Did you -- some of those samples -- were some
17 of those samples that you understood were obtained off
18 eBay?
19 A. That is correct.
20 Q. And were -- some of those samples, did you
21 understand were obtained from individual clients that
22 had a claim against J&J?
23 A. Yes.
24 Q. Okay. And did you analyze all those samples in
25 2017, the fall of 2017?

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1 Just so the record is clear, I'm going to start
2 with the box that's got the J&J -- the box that J&J
3 tested.
4 A. Okay.
5 Q. Okay? And let's start --
6 By the way, did you and your laboratory look at
7 historical samples provided by J&J at J&J's lab over
8 the last several months, in the last year or so?
9 A. Probably the last year, yes.
10 Q. Let's take a step back before we get to these
11 real quick.
12 Originally a couple years ago, did you -- did I
13 provide you samples that I got from collectors -- from
14 one collector, and did other lawyers provide you
15 samples to look at that got -- purchased from eBay and
16 purchased -- or got from individual clients that had
17 claims, and did you analyze a whole bunch of J&J
18 products a couple years ago?
19 A. Yes.
20 THE COURT: Do you want to ask just one
21 question at a time.
22 MR. SATTERLEY: I'm sorry. I apologize,
23 Your Honor.
24 THE COURT: Go ahead. Just start over.
25 I don't know which one he answered there, but

1 A. Yes.
2 Q. And did you issue a written report with
3 photographs and -- and come to opinions and conclusions
4 about those -- those specific samples?
5 A. Yes.
6 Q. And were you examined by J&J lawyers in detail
7 about those samples?
8 A. A number of times.
9 Q. Okay. Did you do what's called a particle size
10 distribution to verify the particle size of the talc
11 and things in the samples?
12 A. Yes.
13 Q. All right. Did you -- subsequent to all that
14 work, the three samples I provided you, the eBay, the
15 clients, did we provide you samples that we got
16 directly from J&J?
17 A. Yes, sir.
18 Q. Okay. And before we got the samples from J&J,
19 directly from J&J, did J&J lawyers cross-examine you
20 and criticize you with regards to the samples that you
21 had off eBay?
22 A. Yes.
23 Q. Okay. Did they accuse of maybe -- or suggest
24 that the lawyers contaminated the samples?
25 A. Yes.

1 Q. Did they suggest maybe the samples were
2 contaminated in some -- by some other third party?
3 MR. CALFO: Your Honor, this is improper
4 direct.
5 THE COURT: May I see counsel at sidebar.
6 MR. SATTERLEY: In the interests of time, I'll
7 move on.
8 THE COURT: All right.
9 MR. SATTERLEY: Okay.
10 BY MR. SATTERLEY:
11 Q. Subsequent to -- to -- in the original analysis
12 you did, did you report, in your opinion, accurate
13 findings of all the asbestos you -- you found?
14 A. Yes, sir.
15 Q. And did you take photographs of them?
16 A. Yes.
17 Q. And did you take EDS of them?
18 A. We did.
19 Q. And did you take selected area electron
20 diffraction?
21 A. Yes, sir.
22 Q. All the backup data?
23 A. Yes.
24 Q. Okay. Now, subsequent to all that, did you
25 obtain directly from me or lawyers representing

1 individuals samples J&J provided from their historical
2 collection?
3 A. Yes, sir.
4 Q. Okay. And what we have in these binders -- do
5 you have in the binders results from some of the
6 historical samples that you've analyzed?
7 A. Yes, sir.
8 Q. And as a matter of fact, did Johnson & Johnson
9 also provide photographs and dates, if we go to the
10 1960s, the historical samples from the 1960s? This is
11 Exhibit 1080 in evidence.
12 So, for example, this one is a photograph of
13 one of the historical samples that your lab and
14 laboratory analyzed; correct?
15 A. Correct.
16 Q. And the way it worked was -- and you correct me
17 if I am wrong, but you -- your lab got just a very
18 small portion of each of the samples so that another
19 laboratory, a laboratory hired by Johnson & Johnson
20 lawyers, could look at those as well; correct?
21 A. That is correct.
22 Q. All right. And included in Exhibit 1080, do
23 you have -- you have photographs of your findings,
24 including photographs of PLM, TEM, and so forth?
25 A. Yes. Yes, that's correct.

1 Q. And do you have also the -- the EDS, the
2 chemistry, for example, the chemistry of what you
3 found?
4 A. Correct.
5 Q. Okay. And do you have the selected area
6 electron --
7 A. Yes.
8 Q. And so in the binder, Number 1080, are there
9 the identification -- photographs of the identification
10 of asbestos and fibrous talc in this binder?
11 A. Yes. The results are the photographs for both
12 the transmission electron microscopy as well as the
13 polarized light microscopy for positive samples,
14 typically using the Blount method for PLM.
15 Q. And many of the photographs, do they also --
16 the samples, have the date of the sample, according to
17 J&J? This was 1966 or '67, according to what they
18 provided to us?
19 A. Yes, sir.
20 Q. And let me just go through the record real
21 quick so that we have the record real clear.
22 The 1970s -- is that 1081 historical samples --
23 the photographs of the historical samples from the
24 1970s?
25 A. Yes.

1 Q. And did your lab and laboratory break the
2 samples down by sample numbers and have an M number,
3 M -- like, for example, M69042, is that a sample --
4 sample number that your lab analyzed?
5 A. Yeah. This would be our sample tracking
6 numbers, where -- when we log samples in, we go ahead
7 and give it a sample tracking number so that we can
8 keep track of it.
9 Q. And I'm going to come back to the '70s in a
10 little bit.
11 In the 1980s, did -- all the photographs of
12 asbestos that you found in the 1980s, is it
13 Exhibit 1082?
14 A. Yes, it is.
15 Q. And does it have -- are these true and accurate
16 photo- -- photographs of the -- of the asbestos
17 anthophyllite, tremolite, actinolite that you found --
18 you and your laboratory found in the Johnson's Baby
19 Powder in the 1980s?
20 A. Yes, sir.
21 Q. In the 1990s -- Exhibit 1083, does it have
22 photographs of nine different samples in the 1990s
23 where asbestos is identified, documented in -- in this
24 in this binder?
25 A. Yes, sir.

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1 Q. And in the 2000s -- and this is going to be --
2 the 2000s, this is going to be Exhibit 1084. Are there
3 five different samples where photographs were taken
4 regarding the presence of tremolite and asbestos in the
5 2000s?
6 A. Yes.
7 Q. And did you -- have you also prepared and
8 provided to Johnson & Johnson a report on Chinese talc,
9 where you analyzed Chinese talc for the presence of
10 asbestos?
11 A. Yes, sir.
12 Q. And did you document asbestos from the Chinese
13 talc from Johnson's Baby Powder?
14 A. Yes.
15 Q. And the last binder is 1065. This is a
16 verification of Lee Poye's TEM analysis of J&J
17 historical Vermont Shower sample -- Shower to Shower
18 samples. And did you take photographs and verify the
19 presence of asbestos from Lee Poye's analysis?
20 A. Yes, we did.
21 Q. And he was here the other day, and he testified
22 that you and your lab verified 98 percent of asbestos
23 that he found in the Shower to Shower.
24 A. That is correct.
25 Q. Now, obviously, I'm not going to go through all

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1 these pictures today. There are literally -- there's a
2 heck of a lot. So -- but I -- what I do want to do is
3 have you explain some things to us.
4 A. All right.
5 Q. And, for example, if you could go to the 19- --
6 Before I go to the 1960s, some of the samples
7 that you looked at, at the request of me and the other
8 lawyers, in 2017, were those samples going back into
9 the '50s and the '40s and the '30s, very old samples?
10 A. Yes, sir.
11 Q. Okay. And did -- did you document the asbestos
12 and take photographs of asbestos in those very old
13 samples?
14 A. I did.
15 Q. Okay. Now, the '60s -- if you could go to the
16 binders that's the '60s. And let's just pick out so we
17 can explain what PLM -- if you could tell me a tab
18 number that would explain what -- what PLM photographs
19 look like so we can talk about what you found.
20 A. Let's just go to Tab -- pick one here -- Tab 3.
21 Q. Tab 3. Okay. And we have page numbers at the
22 bottom.
23 A. That would be page 41.
24 Q. All right. So tell you what. I'm going to
25 take it out of the binder, make it easier for you.

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1 There you go. It's hard to see because of the light.
2 MR. SATTERLEY: Your Honor, may I turn the
3 light off? Maybe -- I don't know if the reflection
4 will -- the front light here?
5 THE COURT: I don't think that's a reflection.
6 MR. SATTERLEY: Not going to work?
7 THE CLERK: I think it's the reflection from
8 the...
9 MR. SATTERLEY: It might be here, on...
10 Oh, there we go. That -- that helps out right
11 there. That helps out.
12 BY MR. SATTERLEY:
13 Q. Dr. Longo, what are we looking at?
14 A. This is a photomicrograph using polarized light
15 microscopy. And in this particular case, for this
16 sample here, the analyst identified this as
17 actinolite/tremolite.
18 Now, this is known as dispersion staining,
19 which is part of what happens in polarized light
20 microscopy. There is actually no staining involved.
21 It's just a matter of changing the characteristics of
22 the optical microscope, cutting the light down and
23 changing the F-stop.
24 And so what we're looking at is light being
25 refracted around the bundle under dispersion staining.

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1 And because of the color of that light being refracted
2 around the fiber under -- under polarized light, it
3 gives you a certain color.
4 And that color there, you would say is sort of
5 yellowish-golden, and it's parallel to the light, so
6 that the light is coming in one direction, parallel to
7 it. And when it refracts around the bundle, it will
8 refract in this light -- in this -- they call it a
9 vibration, but it's actually the wavelength of light.
10 And the analyst will say, "Okay. That is a
11 goldish -- that is a yellowish-gold," and has a chart
12 that they look up and say, "Okay. At this color, it's
13 going to be this refractive indices," meaning 1.62 or
14 1.61.
15 And then he'll -- go to the next one. He'll go
16 to the perpendicular direction.
17 Q. The next slide?
18 A. The next slide.
19 Q. All right. So -- so this -- before --
20 A. That's -- you're putting a purple one on there.
21 That's not the next side. Turn it up --
22 Q. Oh, this way. Double-sided.
23 A. Turn -- turn the one you have upside down.
24 Q. Oh. All right.
25 A. Now, that is that -- that is the exact same

1 bundle. He's now rotated it so the light is going
2 through at a different direction, and you'll get a
3 darker reddish color there. And then he can do the
4 refractive indices, and say, "This is in the range of
5 actinolite/tremolite."

6 These analysts that I have -- this particular
7 person has been doing this for almost 30 years. He's a
8 geologist, trained at McCrone, or Walter McCrone's
9 group, back 30 years ago to do this. All our analysts
10 were trained by Walter McCrone many, many, many years
11 ago, because that's what they -- what he did, and this
12 is how -- the protocol.

13 So they look at this, and then they have some
14 other stuff that they do. Extinction angle. If you
15 keep turning it to some point, the light refracted
16 through the material will be the same as the light
17 around the material on a particular angle. So it
18 disappears. And when it disappears, they call it the
19 extinction angle.

20 And so tremolite and actinolite, if you turn it
21 slightly oblique, start going this way, it just fades
22 out. They'll go, "Okay. That's indicative of
23 tremolite/actinolite."

24 Then the refractive indices -- and then they --
25 and everybody likes the next one because it's such a

1 pretty color. It's called elongation. Now you can put
2 the purple up.

3 Q. Before I get the purple one out, let me just
4 ask a couple questions.

5 It says, "actinolite/tremolite." You -- and
6 you described this as bundles.

7 A. Yeah. Go back to the previous one.

8 Q. Well, I mean, why -- why can't -- why can't
9 this just be a cleavage fragment? This is a cleavage
10 fragment, Dr. Longo, isn't it?

11 A. No. No, it's not.

12 Q. Why not?

13 A. If you -- you can't quite see it from there.
14 If you look at it, you can see striations in the bundle
15 itself. I don't know if you can -- you actually see
16 lines going through it. It's hard to see on this one.
17 We'll get a better -- just because you're blowing it
18 up.

19 So it's difficult to see here, just because
20 you're blowing it up, but it actually has striations
21 going through it that make up this.

22 And it's large. This is 88.5 micrometers in
23 length. If you want to know the aspect ratio, you
24 don't measure the whole bundle. The protocol tells you
25 to measure the individual fibers.

1 And I know it's hard to see it. We might have
2 a better example, because it's bigger than this one.

3 So the aspect ratios on here are all running
4 about -- in this particular one between 160- and
5 200-to-1 aspect ratio. This is a bundle. This is not
6 a cleavage fragment.

7 And it's meeting the counting protocols for
8 aspect ratios greater than 5 to 1, individual fibers,
9 and, therefore, is a regulated asbestos bundle.

10 Q. The purple one that you -- this page 43 --

11 A. This is called elongation. When you turn it in
12 this direction -- you have to put another filter in
13 there. It's a 530-nanometer filter that, again,
14 changes the vibration of the light, gives you these
15 beautiful colors.

16 But it tells you how fast the light goes
17 through the crystal via the orientation, either this
18 way or that way. And if you switch it the other way,
19 it changes colors, and these particular colors will
20 tell you what type of asbestos this is.

21 So it's a very involved analysis.

22 Q. And is it your opinion that this is --

23 Let's zoom it back out.

24 -- tremolite?

25 A. Well, it's actinolite/tremolite. We don't

1 differentiate between actinolite and tremolite. You
2 have to --

3 Q. Under PLM?

4 A. Under PLM, because you have to go to another
5 RI, refractive indices, fluid.

6 And since both of those are regulated asbestos,
7 tremolite and/or actinolite, and actinolite is part of
8 the whole solid solution series of tremolite --
9 meaning, eons ago, when it all formed, what -- if there
10 was a little bit more iron present, you could get more
11 on the actinolite side; if there's less iron, you get
12 more on the tremolite side.

13 Since it's regulated, we don't go the extra
14 step.

15 Q. So on this particular one, this has got
16 M68503-009; right?

17 A. Right. And it has -- you can see the "BL" on
18 there. That means that was the Blount -- this is a
19 Blount PLM.

20 Q. You used the Blount method?

21 A. Yes, sir.

22 Q. Under the -- the same number, M68503-009, we
23 have a TEM photograph. That's going to be on page 50
24 of this exhibit. And explain what this represents.

25 A. This is a tremolite -- it's either a fiber or a

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1 bundle. I would have to be sitting at the microscope
2 so I could adjust the focal plane and go in higher
3 magnification to tell you if it was either a fiber or a
4 bundle.

5 But it -- either way, it's still a regulated
6 asbestos structure, meeting the counting rules. In --
7 in this particular case, it's tremolite.

8 Q. And do you include with this in your report --
9 it's part of exhibit -- the exhibit here, the chemistry
10 and the selected area electron diffraction?

11 A. Yes.

12 Q. And throughout these binders, you do that with
13 regards to the photographs, provide for the TEM, the
14 selected area electron diffraction and EDS?

15 A. Yes.

16 Q. If we go to Tab 4, I want to ask you about
17 page 59 and 60. And page 59 has the pretty purple with
18 the blue. There is an arrow right here, and it says
19 "actinolite/tremolite elongation."

20 A. Yes.

21 Q. Is this another example of asbestos fibers
22 documented by the PLM method?

23 A. Yes. And if you go to page 57, it's that same
24 asbestos bundle. And you can see the striations a
25 little bit easier on page 57.

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1 Q. 57?

2 A. You just had it in your hand.

3 Q. This one right here?

4 A. Yes. I don't know if you can see it -- my
5 glasses are -- need a new prescription -- but if you
6 look at that closely on the ends you can actually see
7 individual fibers on each end of that bundle.

8 Q. Oh, I see. It's a different magnification,
9 then; right?

10 A. That's at a hundred times. There you go.

11 Now, see on the very -- on each end, you can
12 see what looks like little fibers protruding out of
13 that, that's a classic bundle.

14 Q. I got it upside down.

15 A. Now that you have turned it right side up, it's
16 still a bundle.

17 Q. It's still a bundle.

18 A. So that's almost 70 micrometers long, and if
19 you take one of those little fibers in there for the
20 width, because that's how you determine the aspect
21 ratio on the PLM, you easily have something that's
22 200 to 1 or greater for your aspect ratio in that.

23 And interesting, TEM, even though we have
24 positive TEM samples for this same thing, you never see
25 these large bundles. Every microscopist in the country

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1 understands that TEM is biased against these very large
2 bundles. And we don't know why. It gets caught up in
3 the sample prep, because everything you see is smaller
4 than that in TEM. Even though TEM is more sensitive.

5 So there is room for both analysis here, the
6 large stuff and the smaller asbestos stuff, using these
7 two different techniques.

8 Q. Did you find asbestos in samples -- in many of
9 the samples from the '70s as well?

10 A. Yes, sir.

11 Q. And what about the '80s?

12 A. Yes, sir.

13 Q. And what about the '90s?

14 A. Yes.

15 Q. And let's go up to the binder that's listed as
16 the '80s. Exhibit 1082.

17 And, once again, the photographs with the
18 numbers are on there; correct?

19 A. That is correct.

20 Q. So, for example, this one right here, we look
21 and zoom in, it says "1985" on it, I think, on the
22 bottle -- the actual bottle itself. J&J BPC1985;
23 right?

24 A. That is correct.

25 Q. If you could, just in the '80s, give us a

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1 representative sample -- well, let me -- let me pick
2 one out because I don't know what I'm looking at here.

3 Let's look at Tab 2, page 14. It's upside down
4 again. Oh, now it's upside down. I don't know how to
5 use this thing.

6 Anyway, Dr. Longo, what's represented here?

7 A. This is another tremolite/actinolite bundle,
8 and this is again under elongation, so it's measuring
9 the speed of the light through the -- essentially the
10 crystalline fiber.

11 This is at a magnification of 200 times, and
12 it's showing you some of the striations of the
13 individual fibers that you can see if you go back to
14 page 13, which would be the other side of what you
15 have.

16 And this is under dispersion staining. And it
17 shows you under a hundred X that -- and, again,
18 dispersion staining one goes around the bundle, so you
19 see more what's happening on the edges. It again shows
20 individual fibers.

21 And this is a bundle that's 64 micrometers --
22 63.4 micrometers in length. So these are all large
23 bundles that we're finding by the Blount PLM method.

24 Q. And if we flip over to page 16, I see that this
25 is marked anthophyllite on part of the structure -- or

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1 part of the bundle and talc on another part of the
2 bundle. Explain that.
3 A. Well, it's either a transitional but more
4 likely what we're looking at here is the anthophyllite
5 bundling on a particle of talc, because the
6 anthophyllite is all the way from one end to the other.
7 When you have these transitional anthophyllite talc
8 fibers, you'll see that it's almost growing, looks like
9 one is growing inside the other. But here we have it
10 on the edge, and what we have next to it looks like a
11 talc -- under a talc plate. So we see this sometimes
12 where you have an asbestos fiber sitting on or under a
13 talc plate.
14 Q. And then, if we go over to 17, page 17, we have
15 talc and anthophyllite right next to each other.
16 Bundles of both; correct?
17 A. It's either bundles or a small plate. And
18 here's one of the ways you can tell the difference
19 between asbestos and talc. The very thick portion of
20 the talc plate, the colors aren't similar, and then
21 between where we have the talc in the anthophyllite
22 bundle, it's almost a darkish bluish color, and that
23 tells you that is not anthophyllite.
24 So we -- and then we have that one bundle
25 anthophyllite. And, again, I believe it's laying on

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1 top of the talc particle.
2 Q. Then we go to page 19. We have anthophyllite
3 bundle crossed polar. What's that mean?
4 A. The optical -- the polarized light microscope
5 has two polarizing lens, one on the bottom and one on
6 the top. And polarized light is like polarized
7 sunglasses. It causes -- the light is scattering
8 everywhere and it grabs the light and that only is
9 going in one direction. That's why you don't get the
10 glare and stuff when you used polarized light
11 microscopes. You can -- if you fish, you can see the
12 fish better.
13 Now, if you got two of them, you can change the
14 direction pretty drastically and get another direction
15 in there. So in crossed polars, we have the polars
16 turned crossways to each other. And so now we're
17 seeing just the anthophyllite portion where the arrow
18 is. Everything else you see there that we are looking
19 at that talc plate is talc. And you can see that is
20 definitely a different color. And you can also see
21 some of the individual striations there.
22 Q. And do you include in the photographs, the TEM
23 photographs from the same sample? For example, Tab 2,
24 does it have both TEM photographs as well as
25 PLM photographs?

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1 A. Yes, sir.
2 Q. In the interests of time, I'm not going to go
3 through every decade or every -- but are there
4 confirmed photographic evidence of asbestos in the
5 '60s, '70s, '80s, '90s, and 2000s?
6 A. Yes, sir.
7 Q. Any question in your mind regarding that?
8 A. No, none whatsoever.
9 Q. Have you confirmed, in your opinion, what has
10 been documented in the documentary evidence of what we
11 went over earlier about Johnson & Johnson Baby Powder?
12 MR. CALFO: Objection, no foundation. Calls
13 for speculation on the part of this witness.
14 THE COURT: That's overruled.
15 THE WITNESS: I'm sorry. Could you repeat it.
16 BY MR. SATTERLEY:
17 Q. Yeah. Have you, in your opinion, confirmed and
18 taken photographs of the presence of asbestos in
19 Johnson & Johnson Baby Powder that were -- was
20 documented in the documents we went over this morning?
21 A. Yes.
22 Q. Back in -- historical?
23 A. Yes. We -- finding the same thing.
24 Q. With regards to -- we don't have your reports
25 in here, just the photographs, but do you have the

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1 reports, your reports, with you?
2 A. Yes, sir, I do.
3 Q. And, with regards to the Johnson & Johnson Baby
4 Powder, the -- what percentage of positives did you
5 find, meaning what percentage had asbestos in them?
6 A. For the 72 samples, what I call historical,
7 57 containers and 15 railroad car samples, we had an
8 overall total positive of approximately 68 percent of
9 the 72 we analyzed.
10 Q. So does that mean, Dr. Longo, that if 68
11 percent was positive, that means 30 -- was 32 percent
12 there's no asbestos there, in any of those bottles?
13 A. No. Doesn't mean that.
14 Q. Well, why not? Why not?
15 A. It means --
16 MR. CALFO: Objection, Your Honor. This calls
17 for speculation. There's no asbestos.
18 THE COURT: That's overruled.
19 THE WITNESS: Well, it's just below your
20 detection limit. So at some point all's you can say
21 is, it's below our detection limit, we can't verify if
22 it's there, and we can't verify. And nobody can ever
23 say, it's pure and it's not there, because you can't
24 get to that low of detection limit. All's you can say
25 is nondetect. We can't verify it's there or not there.

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1 BY MR. SATTERLEY:
2 Q. How many fibers would have to be there in order
3 for you to even detect it in the method that you're
4 using?
5 A. Right now we have our detection limit that we
6 used here, and I'm just going to scan through the
7 report real quick. We've gotten our detection limit
8 down for these analysis to 3,000 asbestos fibers or
9 bundles per gram of talc. So we have to have at least
10 that many there, in one sample. Then most of them are
11 5 and 6,000 fibers or bundles of asbestos per gram.
12 So think of it as this: If my detection limit
13 is 6,000, that means I have to find -- for me to find
14 one fiber, it has to be at least 6,000 fibers and
15 bundles per gram of cosmetic talc to find one. Because
16 it's spread out through there.
17 Q. And have you -- have you done the calculation
18 with regard to the 7024 with regards to how many
19 asbestos fibers would need to be there per gram under
20 their method?
21 A. Approximately 14 million for one fiber to be
22 there using --
23 Q. For one fiber?
24 A. To be using that method.
25 Q. But wait a second. Their -- their method says

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1 they have as many as 20 or 5 fibers of any -- of each
2 variety; right?
3 A. Correct.
4 Q. So you're saying 14 million for one fiber, so
5 how many asbestos fibers could be present under the
6 7024 method and still qualify as nonquantifiable?
7 A. It works out to be about 6' -- well, you take
8 four fibers, it's around 58 million before you -- you'd
9 have to have one more fiber to get that fifth fiber
10 before you would say, yes, it has asbestos in it.
11 If you only had four tremolites, that would
12 work out to a little bit over 50 million asbestos
13 fibers or bundle per gram to find one, because the
14 detection limit is so bad in that protocol.
15 Q. And if you had -- had to find four or five of
16 the same of each variety, so you could have -- you
17 could have four tremolite, four anthophyllite, four
18 actinolite, and four chrysotile and still call it
19 nonquantifiable, what number are we talking about
20 asbestos fibers present and still be able to say it's
21 nonquantifiable?
22 A. A little bit over 200 million fibers and
23 bundles per gram.
24 Q. I apologize.
25 All right. Now let me switch gears and talk

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1 with you about Colgate, Colgate testing. And Cashmere
2 Bouquet. Last year, at the request of other attorneys,
3 did you analyze 3 -- or did you analyze 38 samples of
4 Cashmere Bouquet?
5 A. Yes.
6 Q. And did you take photographs and document what
7 your laboratory found in tab, what's called Appendix A,
8 Appendix B, and Appendix C?
9 A. Correct.
10 Q. And we marked as Appendix A -- it's into
11 evidence, I should say, as 1091, photographs from
12 Appendix A.
13 And what does that represent?
14 A. Appendix A is the samples that we received from
15 the law firm of Simon Greenstone.
16 Q. And did you document a photograph of the
17 containers, photograph of the analysis? Did you
18 photograph what was identified?
19 A. Yes, sir. But to be fair, to be included in
20 that, we videotaped the opening up of the seal,
21 Cashmere Bouquet face powder samples that we got.
22 Q. These were sealed?
23 A. Not all of them. But 20 out of these 25 were
24 sealed with the manufacturer's sort of a paper-type
25 covering over than the entire area. Underneath it

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1 would be the talcum powder. Sort of a -- they're round
2 and they were all still sealed.
3 Q. Now, I want to -- I'm not going to go through
4 all the photographs in Appendix A, but I want to go
5 through a few of them just so that we can understand
6 what they represent. And I'm just going to randomly
7 pick. If you go to sample, under Tab 12, which is
8 M68072. If you go to -- it's page 220.
9 A. Okay.
10 Q. What are we seeing here in the Cashmere
11 Bouquet, one of the samples?
12 A. I'm sorry. What page are you on?
13 Q. 220. It's got a number, M68072.
14 A. That is a -- it looks like -- if I were to pick
15 that -- let me see if I can find it. All right. Hold
16 on. That would be a tremolite/actinolite bundle for
17 001003. Oh, I'm sorry. We're on -- I'm on the wrong
18 one. You said 220; right?
19 Q. Yeah. 220.
20 A. That would be Number 4 out of that sample.
21 That is a crushed tremolite/actinolite bundle. When I
22 say "crushed," looking at it, it looks like, because
23 this material is milled, meaning it's all ground up to
24 make a certain size, it looks like that was pushed down
25 and caused that bundle to spread apart instead of

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1 saying that's three bundles.
2 So that's a tremolite/actinolite. Very large
3 bundle.
4 Q. And if we flip over to this, what does this
5 represent? This is page 219. Immediately pre --
6 A. This is under crossed polars, and this one is a
7 really good example on how you can see some of the
8 individual fibers that are consistent with what a
9 bundle should be. And they're all going in the same
10 direction, and you can see these individual fibers that
11 make up this bundle. At these magnifications this
12 bundle is approximately about 200 to 250 micrometers in
13 length.
14 So think of it as on a TEM grid. I don't know
15 if Lee Poye showed what TEM grids look like, but this
16 would cover two TEM grids -- openings.
17 Q. And let's see. And just so if we can get a --
18 if you can flip to Tab 3. You document a photograph,
19 the container, this is the Cashmere Bouquet face powder
20 in the way it came to you?
21 A. Yes. This was another sealed container, which
22 we videoed when we opened them to have it documented
23 that it was sealed.
24 Q. If you flip over to page 71 of this same
25 sample, it says "elongation," and it's got that pink,

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1 and it's got a blue -- once again, what does that
2 represent?
3 A. That's most likely a talc fiber. It's not
4 asbestos. No asbestos was found for the PLM in this
5 particular sample. Only the TEM.
6 Q. So, in this particular sample, we go over to
7 the TEM, was tremolite asbestos found in this Cashmere
8 Bouquet product?
9 A. Yes.
10 Q. Is that a photograph -- this is page 76 there,
11 sir.
12 A. Yes. That's a photograph of an asbestos
13 tremolite structure.
14 Q. And do you include in this the chemistry and
15 SAED?
16 A. Yeah. If you go to the very next page,
17 page 77, you can see the chemistry -- the magnesium,
18 the silicon, and the calcium peak -- which, if you
19 remember, looks identical to the NIST standard,
20 National Institutes of Science and Technology. What
21 they say is tremolite asbestos. So it's a perfect
22 match.
23 Q. Well, let me -- why isn't that a cleavage
24 fragment, Dr. Longo? Why isn't that just a cleavage
25 fragment and not asbestos?

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1 A. Well, by all the counting rules in TEM, this is
2 regulated asbestos. It has the appropriate chemistry,
3 appropriate diffraction pattern for the d-spacings. It
4 has the appropriate morphology greater than -- greater
5 than or equal to 5 micrometers in length. This is
6 3.8 micrometers in length. Has to have an aspect ratio
7 of at least 5 to 1 or greater. It matches that. And
8 in this particular case, again, it's on -- just looking
9 at the results here, that would be -- and, again, I
10 would have to be sitting at the microscope to change
11 the focus, but it looks very close to being a bundle
12 just on this two-dimensional plane because of the back
13 end of it has those little bumps. Let's see what the
14 microscopist said.
15 Q. Are you talking about down here, the box down
16 here?
17 A. The microscopist called it a fiber. And that
18 would be the best position because you can change the
19 focal plane.
20 Q. Is it difficult sometimes where there's a
21 photograph like this on calling something a fiber
22 versus a bundle when it's a close call?
23 A. Yes and no. It's difficult if you're just
24 looking at a two-dimensional photograph sitting here,
25 because you're not sitting at the microscope. If

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1 you're at the microscope and that is your -- and you
2 even said you got to distinguish fibers and bundles,
3 it's a lot easier because you can change the focal
4 plane, you can change the contrast, and the microscope
5 has a little gizmo you can flip in and increase the
6 magnification by ten times. So --
7 Q. "Gizmo," is that a technical term?
8 A. It is. If you ever worked in a lab, you'd call
9 it a "gizmo."
10 Q. So --
11 A. It's actually binoculars that you can put in
12 and open up a -- open up a small screen so you can
13 focus in on it.
14 Q. In the Cashmere Bouquet, of the 38 samples --
15 and this is just A. We've got B, Appendix B. Is that
16 another -- this 1092, and that is photographic evidence
17 of the samples and the results and the asbestos that
18 was identified; correct?
19 A. Yes, sir.
20 Q. And was this sent to you by -- these five
21 samples sent to you by a different law firm?
22 A. Levy Konigsberg in New York.
23 Q. And then Appendix C, was this -- this is
24 Exhibit 1093 -- these eight additional Cashmere Bouquet
25 products that you analyzed, your laboratory analyzed,

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1 took photographs of for the presence of asbestos?
2 A. That is correct.
3 Q. And is there a total of 38 that's a part of
4 this report from last fall?
5 A. Yes, sir.
6 Q. And of the 38 samples -- this is going to be
7 Appendix C of the 38 samples -- how many did you find
8 asbestos in?
9 A. 30 of 38.
10 Q. On Appendix C, 1093, the last one, Tab 8, does
11 that include Cashmere Bouquet, it came in this
12 container?
13 A. Yes, sir.
14 Q. And this is page 337 of the photographs here.
15 Is that tremolite asbestos, sir?
16 A. 337?
17 Q. Yes, sir.
18 A. I'm sorry. What appendix?
19 Q. Appendix C.
20 A. Oh.
21 Q. September of 2018. Page --
22 A. Yes, that's tremolite there. All the way to
23 the back.
24 Q. The very last sample.
25 A. Yes. That would be a tremolite structure that

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1 is laying on top of the -- one of the TEM grids. You
2 can see on the left-hand side how you have the little
3 right angle area, dark?
4 Q. Right here?
5 A. Yes.
6 Q. This is -- this is the grid -- the edge of the
7 grid here?
8 A. Correct. So that structure is laying on --
9 over the grid.
10 Q. Is -- so this is described as 4.2 microns in
11 length and 0.4 microns in diameter.
12 Is the fact that it's -- the grid -- it's going
13 underneath the grid, I guess?
14 A. Over the grid.
15 Q. Over the grid?
16 A. Yes.
17 Q. Does that mean that it could be much longer
18 than that, you just can't tell?
19 A. That's correct. You could only -- the rules
20 only allow you to measure the length from where the
21 grid ends and the fiber or bundle starts.
22 Q. And does the chemistry and the diffraction
23 pattern match up with regards to the rules, all the
24 methods, in calling this asbestos?
25 A. Yes, it does.

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1 Q. Now, if somebody were to come into this
2 courtroom and sa, no, no, no, Dr. Longo has got it
3 wrong, that's a cleavage fragment, under the -- under
4 the rules of identifying asbestos set forth by these
5 various methods you've been telling us about, would
6 that be -- would that be accurate?
7 A. No. It has very specific regulated --
8 health-regulated rules, and this is what you have to
9 count. You have to follow the protocol. If you use a
10 certain type of protocol -- and these are in all the
11 protocols for these rules for TEM -- you have to follow
12 them.
13 Q. Now I'm going to switch and go to the
14 20 samples that I requested to your analyst, Zach, go
15 and pick up from RJ Lee, J&J and Colgate's experts.
16 A. Okay.
17 Q. The actual quantity of samples was more than
18 20; correct?
19 A. Yes.
20 Q. At the time of your report in this case, had
21 your laboratory analyzed 20 of those samples?
22 A. Yes.
23 Q. And have we marked the chain of custody for
24 those as 1096?
25 A. I'm looking for them.

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1 Q. It's a -- the skinny binder.
2 A. Yes. Thank you.
3 Q. And if we look at the first three, just the
4 photographs -- this is going to be on page 11 -- we see
5 what the container looks like for the first three;
6 right?
7 A. Yes.
8 Q. And they're dated according to what RJ Lee and
9 Colgate has provided to you; correct? The '70, '70,
10 '73 to '77?
11 A. Yes.
12 Q. And if we look at the next three, did you --
13 did you and your laboratory just pick the first 20?
14 A. Yes.
15 Q. And was there problems with a couple of those
16 so you had to extend to 22?
17 A. There was.
18 Q. And tell us what the problem was.
19 A. They were in methanol. They weren't --
20 Q. What's --
21 A. They weren't in a powder. The sample bottles
22 had alcohol in them, methanol, which is a form of
23 alcohol, mixed with it, so we didn't want to analyze
24 those since they weren't starting with just the talcum
25 powder. It's different, you know, the protocol, so we

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1 just extended it to 22 and did not analyze the ones in
2 methanol.
3 Q. So the -- into evidence the jury can take a
4 look at the photographs of the various containers of
5 the Cashmere Bouquet that goes along with the chain of
6 custody; correct?
7 A. Correct. Now, we didn't receive the
8 containers; we just received samples from the
9 containers.
10 Q. RJ Lee, the laboratory for Colgate, was the one
11 you guys had to actually go to Pittsburgh, Zach had to
12 go to Pittsburgh, to pick these up?
13 A. Yes, sir.
14 Q. In Appendix B do you have the results of the --
15 PLM results for these Colgate -- these Colgate samples?
16 A. Yes, sir.
17 Q. And I have Appendix B having 15 different --
18 excuse me -- 17 different samples. Was there 16 or 17
19 that was positive by PLM?
20 A. Let me get the report, because I don't want
21 to -- for these 20 samples just to make sure.
22 THE COURT: While he's looking for that,
23 Mr. Satterley, you referred to this as "Appendix B."
24 What -- what is the --
25 MR. SATTERLEY: To his report.

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1 THE COURT: What is the exhibit number?
2 MR. SATTERLEY: Oh, I apologize. 1097.
3 THE COURT: All right. So that's -- that's
4 1097?
5 MR. SATTERLEY: Yes, Your Honor. 1097.
6 BY MR. SATTERLEY:
7 Q. And, Dr. Longo, let me see if I can help you
8 out with regards to -- the first -- if we go to Tab 1,
9 the first group of photographs relate to a talc bundle.
10 A. Yeah. The first set of photographs, there was
11 16 positives by PLM --
12 Q. Okay.
13 A. -- and this one was not one of them --
14 Q. Okay.
15 A. -- the very first one.
16 Q. So -- and we'll get to the TEM in a little bit.
17 So 16 of the 20 by PLM had asbestos in them, in
18 your opinion?
19 A. Yes, sir.
20 Q. And did you document that and photograph it and
21 produce it as a report so Colgate could take a look at
22 that?
23 A. Yes, sir, I did.
24 Q. And -- and once -- since I've got this up here,
25 this is page 4 of 1097. How do you know that's a talc

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1 fiber bundle?
2 A. Well, that's -- that's in elongation, but if
3 you go to -- if you go to page 2 --
4 Q. Oh, page 2.
5 A. Now, these samples had lots of other stuff in
6 it, but if you look where that is, where the talc fiber
7 is, you'll notice that from the other ones we looked at
8 and were more yellowish-gold than in this particular
9 case, in parallel, parallel dispersion, dispersion
10 staining, alls you get is this new blue color, this
11 nice bluish color.
12 That tells you it is -- it is talc for these
13 types of samples, as well as the other information that
14 we gleaned from the crystalline analysis by polarized
15 light microscopy.
16 Q. Dr. Longo, has J&J counsel in the past accused
17 you of misidentifying things as asbestos?
18 A. Yes, sir.
19 Q. Okay. Well, why didn't you just identify this
20 as asbestos and say, "This is asbestos," instead of
21 talc?
22 A. Because it's not. That wouldn't be right.
23 MR. CALFO: Your Honor, I object. Vague and
24 ambiguous as to "this." Is it a photograph?
25 MR. SATTERLEY: Yeah, the photograph. That's

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1 what we're talking about.
2 MR. CALFO: I thought that was Colgate.
3 BY MR. SATTERLEY:
4 Q. Whether it's Colgate or Johnson & Johnson --
5 THE COURT: Well, it's --
6 BY MR. SATTERLEY:
7 Q. -- my question is --
8 THE COURT: It's 18 minutes of 3:00. We are
9 going to take our afternoon recess and come back in 15
10 minutes.
11 Ladies and gentlemen of the jury, it is your
12 duty as jurors not to converse amongst yourselves or
13 with anyone else on any subject connected with the
14 trial or to form or express any opinion thereon until
15 the matter is submitted to you.
16 I'll see you back in 15 minutes.
17 (Whereupon, the following proceedings were held
18 outside the presence of the jury:)
19 THE COURT: All right. It appears that all of
20 the jurors have departed from the courtroom.
21 Is there anything we need to put on the record
22 before we go on break?
23 MR. SATTERLEY: Your Honor, the only thing is
24 that I understand Your Honor made rulings sometime
25 today with regard to certain documents. We would just

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1 like to incorporate those documents into evidence
2 regarding -- some J&J documents.
3 And then at some point, we need to address the
4 few remaining objections to the Scala exhibits. And I
5 don't know if Your Honor wants to do it at the end of
6 the day or tomorrow morning or whenever Your Honor --
7 THE COURT: I'm happy to do it at the end of
8 the day. We'll send the jury home at 4:30.
9 MR. SATTERLEY: That's fine, Your Honor.
10 THE COURT: Okay. Anything else?
11 We are in recess.
12 MR. SATTERLEY: Yes, Your Honor.
13 MR. GARY SHARP: Thank you, Your Honor.
14 (Recess taken.)
15 (Whereupon, the jury having entered the
16 courtroom, the following proceedings were held:)
17 THE COURT: Okay. The record reflects that all
18 the jurors are present in their appointed seats,
19 counsel are at counsel table, and we're ready to
20 proceed.
21 Go ahead, Mr. Satterley.
22 MR. SATTERLEY: Thank you, Your Honor.
23 BY MR. SATTERLEY:
24 Q. We were talking about Cashmere Bouquet and
25 specifically about 1097, the PLM results, and I was

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1 asking specifically about some of the photographs.
2 If we can go to the very first -- or the second
3 sample, I'm going to ask you about this. We have
4 anthophyllite and then a talc plate here and then talc
5 at the other end?
6 A. Yes, sir.
7 Q. Explain that.
8 A. Well, that's called the intergrowth or
9 transitional. So you have anthophyllite as well as
10 talc. So when it was formed, you get two different
11 minerals, essentially, on one fiber, or bundle here in
12 this case.
13 Q. I saw that in this -- these pictures, to me --
14 and you can correct me if I am wrong -- there appears
15 to be several photographs. Is this a photograph of the
16 same structure that we just looked at?
17 A. Yes, sir. It's under crossed polars, and it's
18 at a magnification -- a higher magnification of 200 --
19 400 times. The other one was 100.
20 And this just shows the -- so this is at 400
21 under crossed polars, and you can see that it has fiber
22 structures that go all the way through. So it's known
23 as an intergrowth. So it's -- it's not only
24 anthophyllite, but it has some fibrous talc associated
25 with it.

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1 Q. Is this, the next page, page 11, the same fiber
2 that is being analyzed with -- it's got a different
3 color background. Is that the same?
4 A. Yes, sir. This has no filters. It's not under
5 dispersion staining. It's not an image in that
6 530-nanometer plate. It's just under crossed --
7 crossed polars.
8 So you're seeing the talc plate that it's
9 laying on. And this may be, in fact, actually other
10 asbestos fibers laying on top of it, but it's too small
11 for us to resolve and -- and adequately identify on
12 that plate. It has anthophyllite on one end and talc
13 on the other.
14 Q. And the reason why I asked this question is,
15 we, or maybe the jury, when they look through these
16 photographs when they're evaluating this case -- there
17 would be several photographs that appear to be the same
18 structure but different colors and different
19 backgrounds. That's just different ways in which
20 you're looking at it under the microscope?
21 A. Yes, different wavelengths, a lot of which will
22 give you different colors. Some of them -- and you
23 have to just remember to take a look at what the
24 magnifications are. Same fiber, but it's bigger, it's
25 typically at a higher magnification. So smaller ones

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1 are anywhere from 100 to 200, and then you'll also have
2 up to 400.
3 Q. And then this one, for example, this one is on
4 page 12. It looks like it's -- it's going this
5 direction, and this one, it's going this direction. Is
6 that the same situation, it's perpendicular?
7 A. Yes. It's on a stage that you can rotate. So
8 here, we have parallel dispersion, and then here, we
9 have perpendicular dispersion. And since you're
10 changing it, the fiber -- or bundle here, to the
11 direction of the light under dispersion staining, the
12 vibrations that come through change and give you
13 different -- these different colors that then they can
14 then match to the refractive indices, which then will
15 put it in either tremolite, actinolite, anthophyllite,
16 or if there was some other type of asbestos present.
17 Q. The Colgate lawyer wanted me to point that you
18 had gone to another sample, M69934. This is yet
19 another sample with asbestos in it; correct?
20 A. Yes, sir.
21 Q. And I wanted to ask about this. It says,
22 "Elongation at 400 magnification, tremolite."
23 Is this asbestos, Dr. Longo?
24 A. Yes, sir. You're -- we're looking at, again,
25 the exact same structure, higher magnification, under a

1 different type of filter, giving you this color.

2 Q. And do we have, once again, over here, page --

3 two pages over, page 31, exact same structure?

4 A. Oh, you -- you've moved on me.

5 Q. I'm sorry. Page --

6 A. Now we're on -- now we're on Sample 5.

7 Q. Yeah. Sorry.

8 Page 29 and page 30 and page 31, are those all

9 the -- of Exhibit 1097, all the same structure under

10 the microscope?

11 THE COURT: Well, before -- let him answer the

12 question over again as posed. He was still on the last

13 sample.

14 MR. SATTERLEY: I apologize, Your Honor.

15 THE COURT: Because I'm confused. And I

16 don't -- and maybe nobody else is, but I'm confused.

17 So what -- so what is that?

18 THE WITNESS: That's actinolite/tremolite. But

19 let's just start from the beginning of this one so

20 people can look at it and -- and understand what

21 it's -- what's going on.

22 So this is -- and we're starting on page --

23 BY MR. SATTERLEY:

24 Q. 22?

25 A. -- 20 -- 22 now. Now, you've gone to something

1 different.

2 Q. I'm sorry. I was moving too fast.

3 All right. Do you want to go to a different

4 one?

5 A. Let's start from the beginning. So move it up

6 so we can see the -- see the numbers underneath, the

7 actual title of this. Just move the whole thing

8 straight up.

9 Okay. There you go.

10 That identifies what we found in this

11 particular case, going from right to left at the

12 bottom. This was done by the International Standards

13 Organization, polarized light microscopy. No heavy

14 liquid density separation was done. The sample number

15 is M69934-005ISO, and this would be the first structure

16 found under this method.

17 So now we're starting. So this is under

18 dispersion staining, and you can see we have a lot of

19 stuff in here. And then over to the upper right, you

20 see the actinolite/tremolite bundle, and it's

21 32.6 micrometers long.

22 And we're in parallel dispersion. That's

23 the -- usually the first thing up on the particular

24 sample.

25 Now, if you go to the next page, page 23,

1 that's the perpendicular under dispersion staining.

2 You can see the change in color which is consistent for

3 tremolite/actinolite at these wavelengths.

4 Q. And now.

5 A. And now we're getting to the elongation. Now

6 it's at 400 times. So it's been to this, you know,

7 north -- sort of the northeast direction. And that

8 matches the colors it ought to be. And then under

9 crossed polars --

10 Q. Can we go to the next page, 25?

11 A. Well, you go to 25. We're still on this one

12 structure, because we're going through all the

13 different analytical procedures for identifying it.

14 Here we have it under crossed polars. And then the

15 very next one is the last one you would have with

16 crossed polars out. Now you're just looking at it

17 under the light. And you can see the individual

18 striations in there. The polarizers are out. And this

19 is regulated asbestos. It's going to be approximately

20 33 microns long, and those individual fibers in there

21 would give you aspect ratios of over a hundred to one,

22 closer to 200 to 1. So it meets all the regulations

23 that -- for these PLM analysis. For this.

24 Q. Let's keep going through this Tab 4 just so we

25 can talk through -- a complete through one sample so we

1 know what we're looking at.

2 A. So if you go to the very next sample, the very

3 next page where you have that 88.6. Now, pull it up so

4 you can see the bottom. This would be the second

5 structure that we're finding under the ISO method. So

6 you see the 0002? And, again, under parallel

7 dispersion. In this case you have more of the golden

8 yellow. And then the next page would give you the

9 perpendicular dispersion. Not that page.

10 Page Number 28.

11 Q. Go back.

12 A. It's hard to see in this lighting. And then we

13 would go on. Actinolite, tremolite -- the next one

14 would be the elongation, page 29.

15 Q. The pink or purple, is that always going to be

16 the elongation?

17 A. Yes. It's got the right colors at the right

18 direction under the polarizers and under the -- under

19 the 530-nanometer plate.

20 Then the next one is crossed polars.

21 Q. Now, this is page 30 of Exhibit 1097; is that

22 correct?

23 A. Correct.

24 Then the very next one is this same structure

25 again without crossed polars.

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1 Q. Is there any question in your mind, Dr. Longo,
2 that this is regulated asbestos in the Cashmere Bouquet
3 product?
4 A. No, sir.
5 Now, just for completion, let's go to the very
6 next page, page 32. Now, here is the exact same sample
7 under the Blount method.
8 THE COURT: That's not the next page.
9 THE WITNESS: It should be. Page 32?
10 MR. SATTERLEY: Yes, Your Honor.
11 THE COURT: Well, it's a different sample on
12 the left.
13 THE WITNESS: Yes, sir, it is, but it's just an
14 example of the -- now the Blount PLM with the same
15 sample.
16 BY MR. SATTERLEY:
17 Q. Because BL, is that the -- right there. Does
18 that mean the Blount method as opposed to an ISO
19 method?
20 A. Correct.
21 THE COURT: Then the 002 and the 001 are
22 different.
23 THE WITNESS: Yes, sir. This is 005.
24 Now, one of the things you'll notice, it
25 seems -- even though it has some big particles in

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1 there, there's not as much clutter around. It has
2 removed -- and this is -- a lot of this is not talc,
3 this is other ingredients there are in the -- in the
4 Cashmere Bouquet. You can see, even though you have
5 these big particles, it's not all this small, cluttered
6 stuff around, so it shows you how the talc is removed
7 and cleans the sample up.
8 BY MR. SATTERLEY:
9 Q. And the magnification level is different also.
10 It's a hundred magnification as opposed to what you
11 were talking about earlier was 400?
12 A. No. All the dispersion staining is typically a
13 hundred.
14 Q. Oh, okay.
15 A. 400 would be elongation. And if you go to the
16 very next page, page 34.
17 Q. I see. Let me stop there so I can clear my
18 confusion.
19 So when see something that's a hundred, if the
20 shape looks different, it's because it's a different
21 magnification, like a hundred to 400?
22 A. Correct.
23 Q. Okay. All right. Now we're on page -- am I on
24 the right page here, page 33?
25 A. That's 33. So now we're in perpendicular --

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1 parallel. But if you go to the very next page --
2 because this is a good example of a very fibrous
3 bundle.
4 Q. No, wait a second. Let me -- no. This one
5 says perpendicular --
6 A. Perpendicular. If you go to page 34.
7 Q. Okay. I see. I see.
8 A. In this particular one, you can absolutely see
9 the single fibers in the elongation, as well as the
10 next pages, so this is a very good example of a very
11 fibrous bundle.
12 Q. So what we're seeing here on page 34 is a
13 close-up -- closer up view of what we were looking at
14 on page 33, 32, 31; correct?
15 A. That is correct. It's -- we were looking at
16 100. This is now 400.
17 Q. And there we got page 35. Is that yet
18 another -- the crossed polar of the asbestos in the
19 Cashmere Bouquet product?
20 A. Yes, sir. The same structure. It just shows
21 you a little bit more detail of the fibers.
22 And then the -- without the polarizers -- and,
23 again, you can -- you can see the individual fibers.
24 And so on.
25 Q. And it goes -- you have a whole bunch of

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1 photographs that just demonstrate -- do you have a
2 whole bunch of photographs that demonstrate the
3 presence of asbestos in the Cashmere Bouquet product?
4 A. Yes, sir.
5 Q. There's one other term that you used. If we
6 flip over to Tab 10 to the elongation, page 159.
7 Is this Tab 10 yet another asbestos bundle in
8 a Cashmere Bouquet product?
9 A. Yes, sir.
10 Q. And page 160 -- actually, 161. "Aperture
11 diagram partially closed." What's that mean?
12 A. Diaphragm.
13 So that the aperture, which lets the light
14 through, is slightly closed to increase the -- increase
15 the contrast so that you can resolve these individual
16 fibers in the bundles better. It's just a -- it's an
17 optical microscopist's technique for changing the
18 contrast. Instead of hitting a darker button, it can
19 change the light and get you a better contrast.
20 Q. Based upon the PLM results, Dr. Longo, are you
21 of the opinion that there's asbestos in Cashmere
22 Bouquet talcum powder?
23 MR. MULARCZYK: Objection. Vague.
24 THE WITNESS: Yes, sir.
25 THE COURT: I'm going to overrule that. You

1 can inquire on cross-examination.

2 THE WITNESS: Yes, sir, for the samples that we
3 tested.

4 BY MR. SATTERLEY:

5 Q. Well, the four of them by PLM you didn't find
6 asbestos.

7 A. By PLM we did not.

8 Q. What about by TEM?

9 A. Yes, sir. The other four were positive because
10 we're looking at two different types of structures, and
11 so we only analyze those four by TEM. Since the Blount
12 PLM and the ISO PLM were positive, the negative ones we
13 checked to see if the TEM, which is more sensitive,
14 could determine if it was present or not.

15 Q. And Exhibit 1098, the folder, does that
16 represent photographs of some of the TEM results from
17 the Cashmere Bouquet product?

18 A. Yes, sir.

19 Q. And if we go to -- and did you find asbestos in
20 all four of the negatives by PLM?

21 A. Yes, sir, we did.

22 Q. And the second -- that Tab 2, page 9 of
23 Exhibit 1098, what does this represent?

24 A. This is a tremolite bundle, and these are one
25 of these even with the photograph you don't have any

1 doubt telling that's a bundle. You can see one, two,
2 three, four, five, six -- I can see six individual
3 fibers there. Some of those were -- where you've
4 circled actually have two -- two or three pushed
5 together, and, actually, you have one that almost has a
6 splayed end, which you normally do not see on TEM
7 because of the size.

8 Q. And splayed ends, is that a classic
9 identification of a bundle?

10 A. No. It's more of a classic identification of
11 commercial asbestos that's been added to bulk samples.
12 Very rarely do you see splayed bundles in TEM at all
13 because of the size you're looking at. It's the bulk
14 samples.

15 Q. I apologize. I should have asked the question
16 this way: The fact that this is -- these have splayed
17 ends and they're a bundle, does that indicate to you
18 that this is asbestos?

19 A. No. It tells us it's asbestos by meets all the
20 counting definitions, has the right chemistry, has the
21 right diffraction pattern. This is regulated tremolite
22 asbestos. But if you just -- as being interested in
23 this, this is what you would normally see in a product
24 where the asbestos has been added at very high
25 concentrations. It's very rare to see a splayed bundle

1 of tremolite in these talcum powders because tremolite
2 is brittle. So when they mill it, it grinds up. So
3 it's just interesting to see.

4 Q. And in this, you have -- you have -- do you
5 have the chemistry -- the calcium, magnesium, the
6 silica?

7 A. Correct. You have the -- again, it's almost a
8 fingerprint. It's a ratio of magnesium to silica to
9 calcium, all based on the height of the calcium peak.

10 Q. And do you have the diffraction pattern, the
11 SAED, that meets all the requirements that this is
12 asbestos?

13 A. Yes, sir.

14 Q. Now, back on this photograph, I just want to
15 ask, this part right here, is part of the film on the
16 grid torn there?

17 A. It's torn and gone. That's -- that's a carbon
18 film that is put on to the sample, the filter before we
19 dissolve the filter away.

20 That carbon film is actually only about 10 to
21 20 nanometers thick, about 15 to 20 atoms thick, so
22 it's very fragile. And the way it's done is, the
23 sample is collected on a filter. That filter is then
24 coated with carbon, and then a small piece of that
25 filter is put on the TEM grid and then put on filter

1 paper that's soaked with chloroform, and it slowly
2 dissolves away the filter and just leaves a replica of
3 the filter.

4 See all those little holes? Those are all the
5 pores that are in the filter that made a replica of
6 what you're seeing.

7 Q. And the fact that the film is partially gone
8 there, does that in any way detract from the fact that
9 this is a regulated asbestos bundle of tremolite?

10 A. Oh, no. It's -- it's not uncommon to see torn
11 films from just putting it in and out of the microscope
12 because you're going under pressure changes, because
13 it's so fragile.

14 Q. The same tab, Tab 2, what is depicted here, the
15 photograph on page 12?

16 A. Page 12 is another tremolite asbestos. I
17 believe if I was -- I think you can call this a bundle,
18 and it's either laying on top or underneath a talc
19 plate. That thing in the middle.

20 Q. This thing right here?

21 A. Yes, sir.

22 Q. And the chemistry, does the chemistry match up
23 to be a regulated tremolite?

24 A. Yes, sir, it does.

25 Q. And once again, the selected area electron

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1 diffraction, does it match up?
2 A. It does.
3 Q. We have another one here on this sample. And
4 what does this represent?
5 A. This represents talc, fibrous talc.
6 Q. And is it labeled as talc there?
7 A. That's correct. This is not asbestos. This is
8 fibrous talc in the sample.
9 Q. And does it have the chemistry of talc?
10 A. Yes.
11 Q. And does it have the diffraction pattern of
12 talc?
13 A. Yes.
14 Q. So I'm not going to go through all these
15 photographs of all the asbestos in the TEM, but is
16 there any question in your mind, Dr. Longo, that
17 there's asbestos documented by TEM in the Cashmere
18 Bouquet samples that you received from the RJ Lee
19 Group?
20 A. No, there's no doubt.
21 Q. And has it been documented and photographed and
22 produced to the defendants, the lawyers for Colgate?
23 A. Yes, sir.
24 Q. Now, if somebody were to say to this jury that
25 you've never written a letter about or written a report

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1 regarding the presence of asbestos in J&J products,
2 would that be true?
3 A. I've written reports. I'm not sure who I'm
4 supposed to send the letter to.
5 Q. Have you issued those reports and produced them
6 and produced them to J&J and been examined by J&J's
7 lawyers on many occasions?
8 A. Yes, sir.
9 Q. Now I want to switch gears and talk about
10 Patricia Schmitz.
11 Do you have your written, signed report that
12 you issued back in March of this year?
13 A. Yes, sir, I do.
14 Q. Does it outline many of the items that you
15 reviewed, including her deposition?
16 A. Her six volumes of deposition, yes.
17 Q. And did you review the testimony of her
18 sisters?
19 A. Yeah. Joni and Susan. I also reviewed that.
20 So eight depositions. Or actually nine.
21 Q. By the way, I should have asked this question
22 earlier: What does it mean if you find one fiber
23 bundle by TEM? How many fibers is that per gram?
24 A. Depending on the detection limit, either one
25 fiber or one bundle can run anywhere from 6,000 to

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1 9,000 individual fibers in bundles per gram.
2 Q. And how does that equate in terms of how many
3 fibers per bottle?
4 A. Well, if you have a 9-ounce bottle, every ounce
5 is 28.4 grams, I believe, and if you have nine of
6 those, multiple that 28.4 by 9 by 9,000 fibers.
7 Q. Tell the folks on the jury what you did with
8 regards to your evaluation of Mrs. Schmitz' exposure to
9 asbestos from her talcum powder usage and being near
10 her family members when the product was being used?
11 A. I read all her depositions, as well as her
12 sisters' depositions, and then went through and said,
13 okay, well, she stated that, you know, when her sisters
14 were young and with her mother for three months, that
15 she would be there once a day for both sisters when the
16 sisters got bathed, and the mother would use Johnson
17 Baby Powder. And she said she was standing right
18 there. So that would be -- every day for those three
19 months would be two exposures, or two applications.
20 You know, and then -- and I'm going on to be --
21 you know, two times two and a half weeks after that for
22 1.7 years with the sisters, then diapering the sisters,
23 which she helped her mother. So I added up all those
24 applications.
25 And I tried to be conservative because she

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1 would say things like diapering, you know, three to
2 four times per week. I would put 2.5 times per week
3 just for the times being missed, and that sort of
4 thing.
5 So when her mother applied the Johnson Baby
6 Powder to herself, she would be standing there. So I
7 added that up.
8 And so at the end of the day, I could get 2,199
9 Johnson Baby Powder applications.
10 Q. Those 2,199, was that relating solely to 1957
11 to 1967?
12 A. Yes, sir.
13 Q. Did you likewise evaluate the total number of
14 Johnson's Baby Powder applications relating to Vermont
15 talc source from '68 to 2003?
16 A. And that's a good point. I broke it down into
17 the different mines. So the '57 to '67, Johnson &
18 Johnson was using their -- their Italy source for talc.
19 And then I broke it down from 1968 to 2003, which was
20 the Vermont talc source that Johnson & Johnson was
21 using.
22 And for the -- for 1968 to 2003, when Patricia
23 was 10 years old in '68 until she was 13 in 1971,
24 testified that she used Johnson Baby Powder three to
25 four times a week for her personal bathing. So three

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1 to four times a week, using three and a half times a
2 week times the three years that she did that, '68
3 to '71, was 825 applications.
4 Then she testified that she was present and
5 assisted when her mother was incapacitated because of a
6 bad shoulder, that she would bathe her two to four
7 times a week from 1998 to 2' -- approximately four
8 times a week from 1998 to 2005. So I said three times
9 a week times 52 weeks times five years.
10 Q. And you have a total of 1,605 applications?
11 A. Correct.
12 Q. Let me stop you right there. I would like for
13 you to assume -- well, nowhere in her deposition or her
14 sisters' deposition was there any discussion or
15 questions about her father having Alzheimer's; correct?
16 A. That is correct.
17 Q. About caring for him in the hospital bed in
18 their house in their dining room; correct?
19 A. No, sir. That never came out in the testimony.
20 Q. So if there was -- I'd like for you to assume
21 that there's additional testimony that Patricia Schmitz
22 helped take care of her father for roughly ten years,
23 the last ten years of his life, and utilized Johnson's
24 Baby Powder during those ten years, you haven't taken
25 that -- you haven't added that into this calculation;

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1 correct?
2 A. No, not at all. That was -- that information
3 was never brought out in any of the depositions.
4 Q. So that would be on top of the calculations
5 that you've already made here in this report; correct?
6 A. Yes.
7 Q. And there would be additional exposure that
8 would be additive of the exposure assessment you have
9 in Mrs. Schmitz' case?
10 A. That is correct.
11 Q. With regard to the Chinese-sourced talc, how
12 many applications in -- to Chinese-sourced talc?
13 A. 312. From -- again from 2004 to 2005, three
14 times a week, when her mother needed help again.
15 Q. And then Cashmere Bouquet, did you do a similar
16 type of calculation with regards to her testimony
17 regarding her use of Cashmere Bouquet?
18 A. Yes, sir, I did.
19 Q. And what -- how many total applications of
20 Cashmere Bouquet did she have according to her
21 testimony?
22 A. According to her testimony, she used it from
23 1970 to 2005. And that she probably -- and she stated
24 that she used almost every day after bathing, she
25 stated she probably did not use Cashmere Bouquet

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1 20 percent of those days. So not every day during that
2 time.
3 So daily minus 20 percent is 392 (sic) days of
4 use instead of 365, times 35 years.
5 Q. And what's the total application of Cashmere
6 Bouquet?
7 A. That works out to 10,220 applications.
8 Q. Did you also consider Avon and her -- the fact
9 that she used Avon product?
10 A. Yes, sir, I did.
11 Q. And what's the total application from 1980 to
12 2005 regarding her use of Avon?
13 A. 3,250 applications of Avon talcum powder.
14 Q. So what opinions have you developed based
15 upon -- and -- and what calculations have you developed
16 based upon her exposure, the description she has of
17 exposure, your knowledge of -- of this product with
18 regards to, first, Johnson & Johnson?
19 A. Well, the first opinion in -- for each of
20 these, that she would have had significant exposure to
21 cosmetic talcum powder from these three different
22 manufacturers: Johnson & Johnson, Colgate-Palmolive --
23 Cashmere Bouquet -- and Avon.
24 The second opinion is -- based on our testing,
25 based on historical documents, based on the percentages

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1 that we find positive, it's my opinion that more likely
2 than not, when she used any of these products --
3 MR. CALFO: Your Honor, I object to this. He's
4 not an expert in statistics.
5 THE COURT: It's overruled.
6 You can answer that question.
7 THE WITNESS: Thank you, Your Honor.
8 -- that she would have had a significant
9 exposure to airborne asbestos -- and it's
10 interesting -- significantly over background, even
11 though there is no background of tremolite/
12 anthophyllite in the natural environment, unless there
13 is a source.
14 So you can use the IARC number of 1.0 times
15 10 to the minus 5 fibers per cc --
16 BY MR. SATTERLEY:
17 Q. You went too fast for me. 10 to the minus --
18 10 to the minus 5 --
19 A. 0 -- 0.0000.
20 Q. How many --
21 A. Five zeros. A .1 followed by four -- excuse
22 me. Four zeros and a .1. I did that backwards.
23 Q. Four zeros and a -- a 1?
24 A. And a 1.
25 Q. And that's the IARC background number?

1 A. Yes.

2 Q. Okay. And using that IARC back- -- background

3 number, based upon everything you know of Patricia

4 Schmitz, based upon everything you know of the

5 historical testing, based upon everything you know of

6 the scientific literature, did she have significant

7 exposures above background to asbestos from Johnson's

8 Baby Powder?

9 A. Yes.

10 Q. Did she have significant exposure above

11 background to Cashmere -- to asbestos from Cashmere

12 Bouquet --

13 A. Yes.

14 Q. -- talc?

15 MR. MULARCZYK: Objection. Foundation.

16 THE COURT: It's overruled.

17 BY MR. SATTERLEY:

18 Q. Go ahead.

19 A. Yes.

20 Q. And -- and -- and is it -- in terms of exposure

21 to asbestos, is it important to you that these products

22 were intended to be shaken out into the air?

23 A. Yes.

24 Q. And why is that important?

25 A. Because these products are designed to be --

1 not intentionally, but the way they're designed and

2 milled and ground and used, these particles become very

3 airborne very easily. You're not starting with an

4 asbestos product that you have to grind, sand, or do

5 something to get exposure.

6 This is just merely shaking a very fine powder

7 out that gets airborne very easily and stays airborne

8 very easily because of the sizes of those microscopic

9 particles. Excuse me.

10 So the way it's designed, you're shaking out a

11 very fine powder that causes exposure because it gets

12 airborne very easily. And with those accessory

13 minerals, such as tremolite or anthophyllite asbestos,

14 in there, that's what causes the exposure.

15 Q. And is that -- would it be fair to say this

16 product is not -- the asbestos in this product is not

17 encapsulated?

18 A. No, there is no encapsulation involved here.

19 It's just a mixture of cosmetic- or pharmaceutical-

20 grade talcum powder with trace amounts of --

21 potentially trace amounts of amphibole asbestos that we

22 can detect using these protocols we're using.

23 Q. Now, one other concept I want to talk with you

24 about in terms of exposure is a concept called

25 re-entrainment. What is re-entrainment?

1 A. It's an industrial hygiene word, and it's

2 really just a fancy word for getting the dust off the

3 surface and getting it back up into the air.

4 You know, it's like taking a rug out and

5 beating on it. And that dust that's gotten into that

6 throw rug over time will start coming out, and you can

7 see it, or sweeping up dust, where, if it's the right

8 lighting, you can see the dust that's moving as well as

9 what's getting up in the air.

10 So you're disturbing what's happened before,

11 that's now on a surface, and you're disturbing it again

12 by either sweeping or wiping or sometimes even walking

13 through it, because your foot going down causes

14 pressure for it to come up.

15 So it is redistributing asbestos dust that has

16 been put onto a surface after use.

17 Q. And do you have an opinion, Dr. Longo,

18 whether -- I would like for you to assume the testimony

19 will be that occasionally her sisters and herself would

20 clean up the baby powder or the Cashmere Bouquet after

21 they -- they applied it to their body or to their

22 family members.

23 And the cleaning up process, does that result

24 in additional exposures?

25 MR. MULARCZYK: Objection. Foundation.

1 THE COURT: Overruled.

2 THE WITNESS: Yes. In my opinion, it does.

3 BY MR. SATTERLEY:

4 Q. And by the way, Dr. Longo, you weren't in --

5 in -- at their house on Bay -- Bay Street over in

6 Alameda at any point in time; correct?

7 A. I was not.

8 Q. And -- and nobody -- you have not seen anybody

9 measure the level of dust that they were exposed to

10 from any -- any powder product; correct?

11 A. That is correct.

12 Q. You've not seen any instruction or direction

13 from any company saying, "Hey, you better measure the

14 amount of dust you're breathing in" at any point in

15 time, have you?

16 A. I have not.

17 Q. Now, in addition to your analysis, have you

18 relied upon published papers, where published papers

19 talk about --

20 Are you familiar with the Gordon paper in 2014?

21 A. I am.

22 Q. And have you relied upon the Gordon paper?

23 A. I have.

24 Q. And does the Gordon paper have information

25 regarding exposure and exposure that occurs with

1 regards to Cashmere Bouquet product?

2 **A. That paper was all -- was all about exposure**

3 **from using Cashmere Bouquet products.**

4 **Q.** And it was -- was that paper specifically

5 studying exposures to cosmetic talc products in terms

6 of what an individual may have?

7 **A. Yes.**

8 **Q.** And have you also read the Anderson paper,

9 Elizabeth Anderson, with a company called Exponent?

10 **A. I have.**

11 **Q.** And have you looked at the underlying data from

12 that paper with regards to the Cashmere Bouquet product

13 and whether or not it has asbestos in it?

14 **A. I have.**

15 **Q.** And based upon your analysis of that published

16 paper, the Anderson paper, and the underlying data,

17 does the underlying data support the fact that there's

18 asbestos in the Cashmere Bouquet product?

19 **A. Not the way the paper is written, no.**

20 **Q.** Well, what do you mean?

21 **A. Well, it says that it's all cleavage frag;**

22 **there is no asbestos there.**

23 **Q.** Okay. And the paper itself says it's all

24 cleavage fragments?

25 **A. That's what I recall, yes, that -- in my**

1 **opinion, it's redefined what asbestos is.**

2 **Q.** And have you had, in part of your reliance

3 materials, the underlying data from the lab in Hayward

4 to the Anderson paper?

5 **A. Yes, sir.**

6 **Q.** And does the underlying data demonstrate

7 anthophyllite asbestos being present in the Cashmere

8 Bouquet product?

9 **A. Yes, sir, it does.**

10 **Q.** And in your reliance materials, do you also

11 rely upon, with regard to Cashmere Bouquet, J&J

12 documentation from a -- from a Mr. Rolle in 1976

13 regarding finding of anthophyllite in Cashmere Bouquet?

14 **A. Yes, sir, I do.**

15 **Q.** And do you also rely upon J&J internal document

16 from I.W. Sloan, dated March 31, 1976, finding

17 anthophyllite in the Cashmere Bouquet product?

18 **A. Yes, sir, I do.**

19 **Q.** And do you also -- have you also read and

20 reviewed the Colorado School of Mines 1973 analysis of

21 Cashmere Bouquet Sample Number 9 regarding the presence

22 of asbestos?

23 **A. Yes, sir.**

24 **Q.** So based upon everything that you've analyzed,

25 is there any question in your mind, Dr. Longo, that

1 there's asbestos historically found in Cashmere

2 Bouquet?

3 **A. No, sir, there's not.**

4 **Q.** Any question in your mind that asbestos's

5 historically found in Johnson & Johnson Baby Powder?

6 **A. No, there's no question in my mind.**

7 **Q.** Now, me and my law firm, Ms. Clancy's law firm,

8 are paying you for your time here today; correct?

9 **A. Yes, sir. My company will send a bill.**

10 **Q.** And MAS, what is -- what do they -- the hourly

11 rate for your time?

12 **A. I charge \$550 an hour, no matter what I do,**

13 **either in litigation or out of litigation.**

14 **Q.** And do you consult with and -- and testify at

15 the request of defendants in litigation?

16 **A. Yes, sir, I do. But to be fair, actual**

17 **testimony, deposition and trials, is primarily for**

18 **plaintiffs, like 95 percent of the time.**

19 **Q.** And does your -- my -- your hourly rate, does

20 that change whether or not you're hired by a company to

21 assist in litigation or whether they're hired by

22 Ms. Schmitz or somebody like me?

23 **A. No. It's the same price for either side.**

24 **Q.** J&J's -- the lawyers said that you've changed

25 your methodology regarding analysis of talc.

1 Have you done that?

2 **A. No.**

3 **Q.** J&J's lawyers said that you now call something

4 a bundle because it sounds more like asbestos.

5 Is that accurate?

6 **A. No, that's not accurate.**

7 **Q.** Is --

8 **A. They're both regulated asbestos.**

9 **Q.** Is --

10 **A. A fiber is a regulated asbestos. A bundle is**

11 **regulated asbestos. It makes no difference which one**

12 **it is.**

13 **Q.** Is -- is -- if there is a bundle of tremolite

14 that meets -- that has the chemical makeup, meets the

15 SAED to amphibole, and it's a bundle, is there any way

16 a scientist, based upon the methods, can call it a

17 cleavage fragment?

18 **A. No, none. It doesn't make any sense. It's --**

19 **a cleavage fragment can't form a bundle. You're**

20 **breaking a rock, and you get pieces. It's like**

21 **breaking a glass bottle.**

22 Now, all those pieces microscopy would have to

23 be perfect fibers all lining up together, in which

24 they're all pointed in the same direction, and they're

25 all touching. That is an impossibility, for a cleavage

1 fragment or to smash up a rock and -- and make a
 2 bundle. There should be no dispute about that.
 3 Q. J&J's counsel said that the concentration
 4 method Dr. Longo uses simply does not work.
 5 Is that true?
 6 A. No, that's not true at all. It's -- it's -- it
 7 works really well. I'm not the only one who's done
 8 that. Alice Blount did it and published it in a
 9 peer-reviewed paper. Johnson & Johnson was looking at
 10 it all the way back in the '70s.
 11 I don't know how it doesn't work, other than,
 12 no, it can't find chrysotile asbestos. But that
 13 doesn't eliminate the fact that it's very good at
 14 concentrating amphibole asbestos, if present, at the
 15 concentrations that it can find.
 16 Q. J&J's counsel said, "Dr. Pooley concluded
 17 45 years ago that the concentration method doesn't
 18 work."
 19 Have you seen any documentation where
 20 Dr. Pooley, 45 years ago, said the concentration method
 21 and the heavy liquid separation doesn't work?
 22 A. No, sir. I've seen the opposite. He was
 23 looking at patenting that method in England. That's
 24 not something that you would say doesn't work, if
 25 you're thinking about getting a patent.

1 Q. J&J's counsel said --
 2 MR. CALFO: I object. Move to strike. That's
 3 speculation. Pure speculation.
 4 THE COURT: You may inquire on
 5 cross-examination.
 6 BY MR. SATTERLEY:
 7 Q. J&J's counsel said, "he FDA discontinued the
 8 concentration method because it doesn't work a long
 9 time ago."
 10 Have you seen any documentation from the FDA or
 11 otherwise that said they dis- -- adopted or
 12 discontinued the concentration method?
 13 A. No. They sort of threw up -- I mean, what --
 14 there's an explanation for that, if you would like me
 15 to state what they actually said.
 16 THE COURT: Just answer the question. If he
 17 wants an explanation, he'll ask.
 18 THE WITNESS: Sorry, Your Honor.
 19 No.
 20 BY MR. SATTERLEY:
 21 Q. Couple other documents. Then I'm going to sit
 22 down.
 23 This is already into evidence. It's
 24 Exhibit 163.
 25 MR. SATTERLEY: May I approach, Your Honor?

1 THE COURT: You may.
 2 MR. SATTERLEY: And I'll hand you both of these
 3 documents at the same time. They're both into
 4 evidence. This is 163, and this one is 313.
 5 BY MR. SATTERLEY:
 6 Q. And I want to ask you about Dr. Langer,
 7 Dr. Arthur Langer. You personally met Dr. Arthur
 8 Langer?
 9 A. Yes, I have, a number of times.
 10 Q. Is Dr. Arthur Langer a -- a mineralogist?
 11 A. He is.
 12 Q. And has Dr. Arthur Langer been associated years
 13 ago with the Mt. Sinai School of Medicine?
 14 A. He was at one point.
 15 Q. And this first document I want to show you
 16 is -- it's -- that you've seen -- you've seen these --
 17 both these documents in the past; correct?
 18 A. Yes, sir, I have.
 19 Q. And in doc- -- this 163, July 9, 1971, does
 20 this relate to Dr. Langer's analysis of talc back in
 21 1971?
 22 A. It does.
 23 Q. And does Dr. Langer, in this 1971 J&J
 24 memorandum, talk about analysis of talc by use of the
 25 light and the electron microscope of Johnson's Baby

1 Powder?
 2 A. It does.
 3 Q. And does he -- does this J&J internal
 4 memorandum talk about the meeting they had with
 5 Dr. Langer, where Dr. Langer demonstrated his technique
 6 for observing fibrous materials in the Johnson's Baby
 7 Powder?
 8 A. It does.
 9 Q. And does this memorandum in 1971 talk about
 10 Dr. Langer's finding talc and chrysotile in tissue in
 11 1971 from folks being exposed to talcum powder product?
 12 A. Yes, sir.
 13 Q. And your lab has done analysis both those
 14 products and on tissue; correct?
 15 A. That is correct.
 16 Q. And in this 1971 memorandum, does it say,
 17 "Using electron microscopy, Dr. Langer has demonstrated
 18 to me the presence of some very fine fibers at
 19 moderately high magnification, which he identified as
 20 chrysotile asbestos by the typical tubular appearance
 21 of the fiber"?
 22 Do you see that?
 23 A. Yes, sir.
 24 Q. And did we see in -- in some of the photographs
 25 from Dr. Hutchinson at the University of Minnesota the

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1 tubular appearance of chrysotile that's sort of --
2 that's being referenced there?
3 **A. Yes, sir, that's true. It's actually tubular.**
4 **It looks like a straw, a soda straw, that you're**
5 **looking through.**
6 **Q.** And he -- the summary of this internal J&J
7 document says, "Chrysotile is identified in the
8 electron microscope by its" characteristics --
9 "characteristic tubular appearance at high
10 magnification."
11 **Correct?**
12 **A. Yes, sir.**
13 **Q.** Now, the next document I want to ask you
14 about --
15 By the way, Dr. Langer is a noted mineralogist
16 that you've interacted with in meetings in the past;
17 correct?
18 **A. Either in meetings or as an expert on the other**
19 **side of me.**
20 **Q.** Okay.
21 **A. Both ways.**
22 **Q.** The next document I want to ask you about
23 relates to Exhibit 313. This is November of 1972, and
24 it's on Johnson & Johnson letterhead. It's into
25 evidence. And it's called "Antagonistic Personalities

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1 in the Talc Story in the United States," and this is
2 written by Dr. Gavin Hildick-Smith, carbon copy to
3 Dr. Fuller, Dr. Nashed, Dr. Petterson, Dr. Sauchuk
4 Dr. Shelley, and Mr. Zeitz; correct?
5 **A. Yes, sir.**
6 **Q.** And they -- in this 1972 memorandum, they say,
7 "The increase in the profile of talc as a potential
8 health hazard has been actively promoted by a number of
9 individuals for a variety of reasons."
10 Then they go on to identify individuals, and I
11 want to ask you -- Dr. Selikoff, have you read many
12 papers from Dr. Selikoff at Mt. Sinai?
13 **A. I have.**
14 **Q.** Is Dr. Selikoff, in your opinion, a well-
15 regarded expert on asbestos -- asbestos and health
16 issues?
17 **A. Yes, sir. He's considered the pioneer of all**
18 **that.**
19 **Q.** It says, "Dr. Selikoff of Mt. Sinai Hospital,
20 who is an epidemiologist heavily involved with asbestos
21 and its adverse effects on health," he -- "has
22 observed (sic) considerable financing from a variety of
23 sources for research into the epidemiology of asbestos,
24 with particular reference to its industrial hazards.
25 "He retains a press agent on a full-time basis,

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1 who gives him media exposure at regular intervals.
2 "Although he has stated that he doesn't believe
3 that talc is a health hazard and" larger -- "largely
4 concerns his activities with asbestos, he played a
5 significant role in the first talc meeting with the FDA
6 when he initiated proceedings by showing particularly
7 alarming pictures of patients suffering from cancer
8 relating to asbestos.
9 "It is believed that Dr. Selikoff wrote the
10 Merliss paper or at least edited it and provided
11 references for it. See attached."
12 My question to you, Dr. Longo: Have you read
13 and considered the Mt. Sinai work with regard to
14 asbestos in talc in the 1970s --
15 **A. Yes, I have.**
16 **Q.** -- what was published in the scientific
17 literature?
18 **A. Yes, sir.**
19 **Q.** And do you find that to be scientifically
20 useful in understanding the history of -- of asbestos
21 in talc?
22 **A. Yes.**
23 **Q.** They also have on their antagonistic
24 personalities list Dr. Langer, who works with
25 Dr. Selikoff and is a microscopist.

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1 Do you consider yourself a microscopist?
2 **A. Not an antagonistic one, no.**
3 **Q.** Okay. But are you -- you're a -- a
4 microscopist; correct?
5 **A. Yes, sir. I'm a material science engineer**
6 **that's spent a lot of time in microscopy. I'm a**
7 **microscopist, TEM microscopist, SEM. So yes.**
8 **Q.** It says, "There are several other" --
9 "Dr. Selikoff's department who have the same mental
10 attitude as Dr. Selikoff."
11 Have you, over the course of your career, met
12 some of the other folks or -- or, I guess, read some of
13 the papers published by some of the other folks,
14 Dr. Arthur Rolle, Dr. -- forgot the other names.
15 Have you read some of the other Mt. Sinai
16 studies?
17 **A. Yeah. There was, you know, Ivan Rubin. There**
18 **was Dr. Rolle. Obviously, Dr. Langer, who stands out**
19 **the most. But, yes, I have looked over Selikoff's**
20 **guys' works in the past.**
21 **Q.** There are several other names here, and I'm not
22 going to go through them all, but I wanted to ask about
23 Dr. Lewin.
24 Dr. Lewin, who is a professor of analytical
25 chemistry at New York University, have you looked at

1 and considered Dr. Lewin's results and his findings of
2 asbestos in -- in talc?

3 **A. Yes, sir, I have.**

4 **Q.** They conclude, "We believe that the Selikoff
5 group, Mr. Kretchmer's group, Dr. Lewin, and
6 Dr. Weissler are in constant communication, although
7 there is some disagreement between Dr. Selikoff and
8 Mr. Kretchmer over Mr. Kretchmer's publicity and
9 Dr. Selikoff's research findings which were not
10 accurately presented in the newspaper."

11 My question to you is, have you ever taken all
12 the -- the reports that you've issued and put them in a
13 scientific journal?

14 **A. Not yet, no.**

15 **Q.** And have you just recently, in the past few
16 years, analyzed talc for the presence of asbestos?

17 **A. Yes, sir. I only started doing that two years**
18 **ago.**

19 **Q.** Okay. And prior to analyzing talc for the
20 presence of asbestos just a couple years ago, did you
21 know that Johnson's Baby Powder had asbestos in it?

22 **A. I had no idea.**

23 **Q.** Prior to analyzing the presence of asbestos in
24 Cashmere Bouquet just a few years ago, did you have any
25 clue whatsoever that it had asbestos in it?

1 **A. Not until the 2015 paper came out and I was**
2 **talking to Dr. Millette and others, who were starting**
3 **to do this work. But before that, never considered**
4 **that talcum powder would have asbestos in it that --**
5 **that we're finding.**

6 **Q.** When you said 2016 (sic), you mean the Gordon
7 paper in 2014?

8 **A. 20- --**

9 **Q.** 2014?

10 **A. 2014, 2015.**

11 **Q.** Okay.

12 **A. That's when I started noticing it.**

13 **Q.** And -- and prior to a couple years ago, when
14 you were analyzing this talc, had you ever had access
15 and reviewed the historical internal documents of
16 Johnson & Johnson regarding the presence of asbestos in
17 talc?

18 **A. No, not until I got involved.**

19 **Q.** And prior to just a couple years ago, had you
20 reviewed any internal company documents historically of
21 Cashmere Bouquet?

22 **A. No, sir.**

23 **Q.** Have all of the opinions been stated here
24 today, Dr. Longo, to a reasonable degree of scientific
25 certainty?

1 **A. Yes, sir.**

2 **MR. SATTERLEY:** I might have -- I may have
3 follow-up questions, depending on what questions these
4 folks ask you. Okay?

5 **THE WITNESS:** Sure.

6 **MR. SATTERLEY:** Thank you so much.

7 **THE COURT:** Mr. Calfo.

8 **MR. CALFO:** Yes, Your Honor.

9 **CROSS-EXAMINATION BY MR. CALFO:**

10 **Q.** Good afternoon, Dr. Longo.

11 **A. Good afternoon.**

12 **Q.** I'm just going to ask you one question right
13 off the bat.

14 **A. Sure.**

15 **Q.** You just told this jury under oath that you
16 have only started analyzing cosmetic talc two years
17 ago. Didn't you just tell the jury that under oath?

18 **A. Let's see. 2017, 2018, 2019. Yes, sir.**

19 **Q.** Okay. Good. We'll talk about that a little
20 bit later.

21 **A. I guess two and a half years now.**

22 **Q.** Okay. Let's start with a -- a few things, if
23 we could --

24 **A. Yes, sir.**

25 **Q.** -- that I told the jury in opening.

1 **MR. CALFO:** Your Honor, I would like to
2 publish, if I could, Defense Exhibit 421331.

3 **MR. SATTERLEY:** It's not in evidence,
4 Your Honor.

5 **MR. CALFO:** It's a demonstrative, Your Honor.

6 **THE COURT:** I haven't seen it.

7 **MR. CALFO:** May I -- may I approach?

8 **THE COURT:** Can we talk at sidebar.

9 (Whereupon, a sidebar between the Court and
10 counsel was had and not reported.)

11 **BY MR. CALFO:**

12 **Q.** Dr. Longo, what I am going to ask you is this:
13 Do you agree with this statement? You've never tested
14 cosmetic talc when you weren't being paid to do it by
15 the plaintiffs' lawyers; isn't that right, sir?

16 **A. That is correct.**

17 **Q.** And, in fact, you told the jury some numbers,
18 but isn't it true, Dr. Longo, that 100 percent of your
19 work in talc litigation is for the plaintiffs'
20 attorneys?

21 **A. Yes, that's correct.**

22 **Q.** In the last 30 years, working as an expert for
23 plaintiff law firms, you told us your company billed
24 \$30 million; is that right?

25 **A. Yes, sir. About a million a year.**

1 Q. In fact, you've testified before, Dr. Longo,
2 that the money you've made working as a litigation
3 consultant and expert witness has allowed your lab to
4 survive; isn't that right?
5 A. That's a true statement.
6 Q. And one of the things that you mentioned before
7 is, you've got to keep your lights on; right?
8 A. Yes, sir. If you work in the office, you need
9 to keep the lights on.
10 Q. And just so there's no mistake, you own
11 75 percent of your company, don't you?
12 A. Yes, sir, I do.
13 Q. And you billed \$30 million just to the
14 plaintiffs' lawyers; true?
15 A. I believe that's correct. For all the work we
16 do, all the different scientists that work on the
17 projects, yes, sir.
18 Q. You're not a geologist; true?
19 A. I do not have a degree in geology.
20 Q. And you don't have a degree in mineralogy, do
21 you, Dr. Longo?
22 A. No, I don't.
23 Q. So let me ask you this: If the plaintiffs'
24 lawyers, when they hired you, were looking for somebody
25 who had a degree in geology and mineralogy, that

1 wouldn't have been you, would it?
2 A. Well, if that was their criteria. I don't have
3 a degree in geology or mineralogy, so...
4 Q. Dr. Longo, you've never been to any of the
5 mines that you just told us about, have you?
6 A. No, sir, I haven't.
7 Q. And you mentioned -- I -- did you mention you
8 worked for NASA?
9 A. Yes, sir.
10 Q. Did you mention you work for ASTM?
11 A. I didn't mention I worked for NASA, but I have,
12 but I've never worked for ASTM.
13 Q. Okay. Well, the truth is, none of that work
14 that you had done that's on your resumé had anything to
15 do with testing cosmetic talc powder; isn't that right?
16 A. Yes and no. And I'll explain, if you like.
17 Q. Go ahead, Doctor.
18 A. No, it doesn't have anything to do with
19 analyzing cosmetic talc, per se, but it has everything
20 to do with the fact that we saw problems for scientists
21 for microscopic issues, and all of these studies that
22 we have done for all these different companies involved
23 some sort of development and understanding the problem
24 and using the best methodology.
25 So that's --

1 Q. Doctor, we're going to go --
2 A. -- that's the "yes and no" part.
3 Q. We are going to go through some of the
4 documents that you told the jury about with Johnson &
5 Johnson.
6 First of all, you don't know anyone at
7 Johnson & Johnson; you didn't work there. Right?
8 A. You're correct on that.
9 Q. All right. We'll get into that in a little
10 bit.
11 But before we do, no government agency has ever
12 asked you to test cosmetic talc; isn't that right, sir?
13 A. That's correct.
14 Q. And you've not written a written,
15 peer-reviewed, published paper anywhere in the world in
16 any way relating to cosmetic talc; isn't that right?
17 A. That's correct. We have not published these
18 results yet.
19 Q. And Doctor, if plaintiff lawyers were looking
20 for somebody who was well published in the scientific
21 literature on cosmetic talc, that would not have been
22 you, would it?
23 A. No, it would not.
24 Q. So let me ask you this. You told the jury a
25 little bit about your background in material science.

1 You remember that?
2 A. Yes, sir.
3 Q. You didn't take any courses whatsoever that
4 dealt with asbestos in undergraduate studies, did you?
5 A. That is correct.
6 Q. In other words, you didn't go to college to
7 study asbestos, did you?
8 A. No, sir, I didn't.
9 Q. In fact, you didn't become interested in
10 material science until after college; true?
11 A. Well, after my undergraduate degree, I -- my
12 whole life, I was going to be a veterinarian. I mean,
13 studied it, everything in my life since I was 6 years
14 old. Got my four-year degree and got rejected from
15 veterinary school. Couldn't believe it.
16 So I was looking -- I didn't have a Plan B, so
17 I was looking for a job, and the material science
18 department had an opening for a lab tech, because I had
19 to support myself.
20 Q. So Doctor, as I understand it -- --
21 A. And they invited me to be a graduate student
22 there, and I said, "No, no. I'm going to veterinary
23 school. I'm doing post baccalaureate."
24 And they said, "Well, I think maybe the board
25 would have a better idea" -- "it might be better if you

1 were in graduate school."

2 I said, "Ah, okay," and I never looked back.

3 So that's how I became a material scientist.

4 Q. And I thank you for that. Thank you for that,

5 Doctor. We appreciate it.

6 A. You're welcome.

7 Q. Now, you didn't take any courses that

8 specifically dealt with asbestos to get your master's,

9 did you?

10 A. No.

11 Q. Is that true?

12 A. That's true.

13 Q. And you didn't take a single class that dealt

14 specifically with asbestos during your Ph.D. work, did

15 you, Doctor?

16 A. Not per se, no.

17 Q. In fact -- I think Mr. Satterley asked you --

18 you're not a medical doctor; right?

19 A. No, sir, I'm not.

20 Q. And when we talk about Ms. Schmitz -- you don't

21 treat patients; true?

22 A. No, sir, I don't.

23 Q. And you didn't review any of Ms. Schmitz's

24 medical records; true?

25 A. That is true, I did not.

1 Q. And I think you told me under oath that you

2 cannot say one way or the other what caused

3 Ms. Schmitz' mesothelioma. True?

4 A. No, sir. I never talk about causation effects.

5 I let that -- others do --

6 Q. And --

7 A. -- debate or discuss that.

8 Q. And one of the things you told me in your

9 deposition -- in fact, I think you volunteered it --

10 is, you don't know where -- you are not going to opine

11 where her mesothelioma originated. True?

12 A. No, sir. I don't talk about medical issues.

13 Q. Okay. Now, you mentioned a little bit about

14 industrial hygiene; right?

15 A. Yes, sir.

16 Q. And you took no undergraduate or graduate -- or

17 graduate courses in industrial hygiene; isn't that

18 right?

19 A. That is correct.

20 Q. And you're not a certified industrial

21 hygienist; true?

22 A. That's true. I'm not.

23 Q. And you never took the test to be become

24 certified; correct?

25 A. That is correct.

1 Q. And -- and we're going to -- as I told you, we

2 are going to talk about some internal Johnson & Johnson

3 documents. You told us you never worked at Johnson &

4 Johnson; right?

5 A. That's still correct.

6 Q. And you don't know Dr. Hopkins personally;

7 true?

8 A. That's true.

9 Q. And you don't know any recipient of any of the

10 Johnson & Johnson documents, do you, sir?

11 A. No, sir, I don't.

12 Q. And you've never spoken to any of them, have

13 you?

14 A. No, sir, I haven't.

15 Q. So let's talk a little bit about your

16 testifying in asbestos litigation. And I think you

17 told us since 1989 or 1990. Is that correct, Doctor?

18 A. I think I gave my first deposition in '91 or

19 so; '92, maybe, the latest.

20 MR. CALFO: Let's pull up Defense

21 Exhibit 42125, which -- I think the plaintiffs had a

22 different exhibit, which was --

23 I can't remember. Do you remember, Counsel?

24 MR. SATTERLEY: It was a defense exhibit. It

25 was, I think, 199 or something like that.

1 MR. CALFO: Your Honor, can we fix it, get the

2 number? I have my exhibit, but I think the plaintiff

3 used his.

4 THE COURT: You can publish that one.

5 BY MR. CALFO:

6 Q. And Doctor, I don't want to belabor this too

7 much, but this was an advertisement you ran 30 years

8 ago. And you ran that ad also in the National Asbestos

9 Council magazine; true?

10 A. That's true.

11 Q. And did you tell the jury you weren't

12 advertising your litigation or lawsuit -- lawsuit

13 services here?

14 A. Yes, sir. I was advertising our final air

15 clearance and what a good job we did.

16 Q. So, even though you chose to picture yourself

17 in a courtroom in that photograph. That's true?

18 A. That's true.

19 Q. And you told the jury you were advertising your

20 laboratory services, but this photograph is not in your

21 fancy lab, is it, sir?

22 A. It's not in our lab, no.

23 Q. You're wearing a suit, aren't you?

24 A. Yes, sir.

25 Q. You're not wearing a lab coat; true?

1 **A. That's still true.**

2 **Q.** And your quote there, on the top, if we look,

3 it says, "Will your TEM laboratory's data make it

4 through the toughest meeting of your life?"

5 Do you see that, sir?

6 **A. Yes, sir.**

7 **Q.** And that meeting you're portraying is a

8 courtroom; true?

9 **A. Yes, sir. If our client -- the data was**

10 **challenged and we had to go defend it for our client,**

11 **we would do it.**

12 **Q.** So the meeting that you are portraying is there

13 in a courtroom; true?

14 **A. That's true.**

15 **Q.** Let's go to the next one.

16 "Not only" -- if we can find it there. "Not

17 only will the data stand up in court" --

18 MR. CALFO: Can we pull that up?

19 Let me put it on the Elmo.

20 MR. SATTERLEY: It's 1099.

21 BY MR. CALFO:

22 **Q.** "Not only will the data stand up in court, so

23 will the professionals who documented it."

24 Right?

25 **A. Yes, sir. I think it's missing some stuff.**

1 **Q.** I think I heard you tell Mr. Satterley that

2 language means standing up in court for final air

3 clearance samples.

4 Did you tell Mr. Satterley that?

5 **A. Yes, sir.**

6 **Q.** By the way, just so we're clear, final air

7 clearance samples, those are air samples taken from

8 buildings like schools where asbestos has been removed;

9 isn't that right?

10 **A. That is correct.**

11 **Q.** But, Doctor, you've never testified in court to

12 defend your air clearance results, have you?

13 **A. No, sir, I haven't. We're that good.**

14 **Q.** And if we look at the bottom of your

15 advertisement, it says, "Professional asbestos

16 consultants and contractors know that when the job

17 demands the best final air clearance testing by TEM,

18 you go to the people whose rigorous in-house quality

19 control measures produce TEM results and professional

20 support that stands up in the toughest tests you may

21 face." Isn't that right?

22 **A. Yes, sir, that's what it states.**

23 **Q.** And again, Doctor, what you're talking about

24 are the toughest tests you face in court; isn't that

25 true?

1 **A. For clients who are taken in there, yes, sir.**

2 **Q.** And, since this ad was run, your business in

3 litigation has really picked up, hasn't it, sir?

4 **A. Since the ad, not really. It's -- had nothing**

5 **to do with getting involved in litigation a couple**

6 **years later.**

7 **Q.** Well, since this ad ran in the National

8 Asbestos Council magazine, you've given about 3,000

9 depositions; right?

10 **A. Yes, sir. Over 30 years, that's about correct.**

11 **Q.** And you testify, on average, once or twice a

12 week; isn't that true, sir?

13 **A. That is correct.**

14 **Q.** And you've testified in front of juries just

15 like we have now hundreds of times, haven't you, sir?

16 **A. Yes. That's correct.**

17 **Q.** And you've been designated as an expert several

18 thousand times by plaintiffs' lawyers suing for money

19 in litigation, haven't you, sir?

20 **A. That's probably correct, yes.**

21 **Q.** And you've testified to this: You think every

22 plaintiff's attorney in the country lists you in any

23 type of asbestos litigation; isn't that right, sir?

24 **A. Yes, sir, I think that's happened.**

25 **Q.** Let's talk about some of the work you've done

1 for plaintiff law firms before you ever started working

2 on cosmetic talc. Okay?

3 **A. That's fine.**

4 **Q.** And by the way, you know, people have been

5 testing cosmetic talc for over 70 years; right?

6 **A. That's what it looks like.**

7 **Q.** And you just told the jury the first time you

8 ever got involved was two or three years ago; right?

9 **A. Two and a half years ago, that's correct.**

10 **Q.** But you've been doing asbestos litigation for

11 decades and decades and decades; isn't that right,

12 Doctor?

13 **A. Over a few decades, yes, sir.**

14 **Q.** For the better part of your career, Doctor,

15 you've run tests on asbestos-containing products;

16 right?

17 **A. Yes, sir. That's my area of interest.**

18 **Q.** And why don't you tell the jury about the

19 asbestos-containing products -- well, let me ask you

20 this: You've testified about asbestos-containing

21 automotive brakes; true?

22 **A. That's true.**

23 **Q.** Asbestos-containing boiler insulation?

24 **A. That is correct.**

25 **Q.** Automotive brake clutches?

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1 A. Yes, sir.

2 Q. Compressors?

3 A. If it has a certain type of gasket in it, yes,

4 sir.

5 Q. Cement pipe?

6 A. Yes.

7 Q. Has a lot of asbestos in it, doesn't it?

8 A. 20 -- let's see -- runs anywhere from 15 to

9 22 percent asbestos.

10 Q. And we don't have it in the courtroom, but

11 there are ceiling tiles that have asbestos that you've

12 testified about; true?

13 A. That's -- in the past, that's correct.

14 Q. Floor tiles with asbestos in it?

15 A. Yes, sir.

16 Q. Gaskets have a lot of asbestos, don't they,

17 sir?

18 A. Industrial gaskets have quite a bit, about

19 70 percent. Anywhere from 65 to 85 percent depending

20 on what specification, what pressure, what temperature

21 it has to be at.

22 Q. Insulating cement. You testified about all the

23 asbestos in that, haven't you, sir?

24 A. Yes, sir.

25 Q. Joint compound?

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1 A. That's correct.

2 Q. And joint compound is the stuff you put on your

3 construction walls?

4 A. For drywall, the seams. Typically known as mud

5 where they can take a seam, put drywall on it, sand it

6 to the point where you can't tell where that seam is

7 anymore, or nail hole, or what have you.

8 Q. I'm going to ask your help with this, Doctor.

9 What's Monokotay (phonetic)? I don't even know

10 how to say it.

11 A. Monokotay?

12 Q. Yeah. What is that?

13 A. Well, at this point I could just make up

14 anything. I think what you're trying to say is

15 Monokote fireproofing, Monokote 2 -- 1, 2, and 3.

16 Q. And that has asbestos in it?

17 A. Yes, sir. That was a fireproofing that was

18 manufactured by W.R. Grace from about 1961 to 1971.

19 Had approximately 10 percent chrysotile asbestos,

20 35 percent vermiculite, and 65 percent gypsum. Or

21 55 percent gypsum.

22 Q. Just to round this off, I don't want to take

23 too much time, but you've testified in cases because

24 pipe has insulation around it, with asbestos; right?

25 A. Yes, sir.

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1 Q. Packing?

2 A. Yes.

3 Q. Textured paint?

4 A. Some textured paints do, not all.

5 Q. And wire has asbestos. You've testified about

6 that, haven't you?

7 A. Yes, sir. Primarily for defendants, because

8 for whatever -- because it doesn't release asbestos

9 like some of the other asbestos products.

10 Q. Now, you were paid by plaintiffs' attorneys in

11 lawsuits to test those asbestos-containing products,

12 weren't you?

13 A. No. I wasn't paid by defense -- plaintiffs'

14 attorneys to test the wire. That was defense

15 attorneys. And many of those tests we did on our own

16 for research. But some of those tests were paid for by

17 plaintiffs' attorneys.

18 Q. Doctor, you were hired to measure the amount of

19 asbestos those products have in them, weren't you?

20 A. In some cases, yes; in some cases, no.

21 Q. And of those products, most of them had

22 asbestos where the product was intentionally added as

23 part of its design; true?

24 A. That is true.

25 Q. And some of them, like the gaskets, I think you

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1 told us, could contain as much as 85 percent asbestos;

2 true?

3 A. Industrial gaskets, that's very true.

4 Q. And that's different from a product that may

5 have a trace amount of asbestos as an accessory

6 ingredient; true?

7 A. It's different concentrations, that's true, but

8 a completely different type of product. One's been

9 manufactured with asbestos and you actually have to do

10 something to it to get high exposures.

11 The other one, even though there are trace

12 amounts, is a very fine powder that you shake out on to

13 your body every day if you use it continuously. So you

14 can't compare one with just a little bitty trace versus

15 one that has a lot of asbestos. It all depends what

16 you do to that one with all the asbestos.

17 Q. Doctor, what you've done for 30 years is you

18 come into court and you talk about all those

19 asbestos-containing products and all the dust and that

20 the people breathe; right? That's what you've been

21 doing. You've done tests on that.

22 A. Yeah. But you're kind of embellishing what I

23 do.

24 MR. CALFO: Your Honor, I move to strike.

25 THE COURT: He can answer the question.

1 MR. CALFO: Okay. Please do.
2 THE COURT: He's responding directly to your
3 question.
4 THE WITNESS: What I do is just don't go in and
5 say all this dust comes flying out. We look at
6 particular type of work practices. You can take an
7 asbestos gasket that has 70 percent asbestos in it,
8 pick it out, put -- it's new, put it on a flange, you
9 don't get exposed -- or you can't -- too low to measure
10 it. But when they take that gasket off at a later date
11 and use a power grinder at 4500 rpm that's using air
12 blowing around, yes, you get very high exposures.
13 What we're talking about here is powder that is
14 as fine as cement powder that you are putting on your
15 body. So you can't compare one has a lot of asbestos
16 in it versus another one that's a very fine powder
17 because of the asbestos content.
18 So it's different.
19 BY MR. CALFO:
20 Q. Well, let me -- for example, here, in some of
21 the Johnson's Baby Powder bottles you tested, you
22 detected no asbestos; right, Doctor?
23 A. That is correct.
24 Q. In fact, I told the jury in opening of the
25 bottles you claim to find asbestos in, the lowest

1 concentration was 0.0000033. Do you remember finding
2 asbestos of that amount, percent by weight?
3 A. Yes. By weight percent, yes.
4 Q. So we all know what we're talking about here,
5 just so we're clear, you've been talking all day about
6 Johnson's Baby Powder and Cashmere Bouquet; right?
7 A. Yes, sir.
8 Q. And so we all know what we're talking about
9 here today, when you talk about talcum powders used on
10 babies, you're talking about Johnson's Baby Powder;
11 right?
12 A. Yes, sir.
13 Q. And, in fact, of the bottles of Johnson's Baby
14 Powder you claim to find asbestos in, the highest
15 amount was 0.035; true?
16 A. By weight percent, not by fiber bundle count.
17 That's true.
18 Q. And before you got heavy into cosmetic talc
19 lawsuits in the last two or three years, about 35 to
20 40 percent of MAS's business came from consulting in
21 litigation; true?
22 A. That's true.
23 Q. But in the past year, your litigation
24 consulting increased to about 70 percent of your entire
25 business; isn't that right?

1 A. That is correct.
2 Q. And the jump from 40 to 70 percent is primarily
3 due to your work now in talc litigation, which is just
4 in the last two or three years; right, Doctor?
5 A. That is very true.
6 Q. Now, before we talk about your testing, let's
7 talk about what you were asked to do, okay?
8 It wasn't, I think you said, until 2016, or was
9 it 2017 that you started getting involved in cosmetic
10 talc litigation?
11 A. It was the end, I believe, of 2016 -- 2017 when
12 we -- after researching and picked the type of analysis
13 we were going to do and draw the heavy liquid. I think
14 it was early 2017 we started doing the first analysis.
15 Q. Okay, Doctor. And it wasn't until late 2016
16 when you were asked by Mr. Satterley that you got
17 involved in cosmetic talc litigation; right?
18 A. That is correct.
19 Q. And you've testified, I think you just told us,
20 under oath, that prior to 2016, you had never tested a
21 cosmetic talc powder at all for any reason; right?
22 A. I don't think so. I can't find any record of
23 cosmetic talc versus industrial talc.
24 Q. Where I'm going with this is, so if the
25 plaintiff lawyers, when they hired you, were looking

1 for somebody who had been in the practice of testing
2 cosmetic talc before 2016, that would not have been
3 you; right?
4 A. That's correct.
5 Q. In 2016 what happened is you received samples
6 of Johnson & Johnson talc from three plaintiff law
7 firms; right?
8 A. That's correct. 2016, 20' -- early 2017, I
9 think.
10 Q. Thank you, Doctor.
11 And one of the law firms that you received the
12 samples from was Mr. Satterley's firm and Ms. Clancy's
13 firm, the Kazan firm; true?
14 A. That is true.
15 Q. The other firm was the Lanier law firm?
16 A. That is true.
17 Q. And the other one I think you told us about was
18 the Simon Greenstone Panatier firm; true?
19 A. That is correct.
20 Q. And the plaintiff lawyers at that time didn't
21 just send you Johnson & Johnson talc to test, did they?
22 A. At some point we also received Cashmere Bouquet
23 and we've also received others. Avon, I believe; Jean
24 Nate, I think; certainly Chanel; and Beverly Hills --
25 Q. And by the way --

1 A. Giorgio Beverly Hills.
 2 Q. By the way, you mentioned Avon. Is it your
 3 opinion that all the Avon products that Ms. Schmitz
 4 used had asbestos in them?
 5 A. Based on our analysis of Avon products, I would
 6 say more likely than not, yes.
 7 Q. And, Doctor, on the very same day you were sent
 8 the samples your lab purchased two bottles each of
 9 Johnson's Baby Powder and Gold Bond; right?
 10 You know what Gold Bond medicated powder is?
 11 A. Yes, sir. I'm just trying to think. I think
 12 you're correct.
 13 Q. But you know -- or let me ask it this way: But
 14 you knew from the very start, when you were hired, your
 15 work was going to primarily involve Johnson & Johnson;
 16 right?
 17 A. That's what we were asked to test the most,
 18 yes.
 19 Q. Because it was clear to you the interest of
 20 these plaintiff lawyers was in Johnson & Johnson --
 21 MR. SATTERLEY: Objection, Your Honor.
 22 THE COURT: Sustained.
 23 BY MR. CALFO:
 24 Q. In fact, almost one year after you got --
 25 By the way, you got bottles of Cashmere Bouquet

1 in 2016 and 2017, didn't you?
 2 A. 2017, yes, sir.
 3 Q. Almost one year after you got the bottles of
 4 Cashmere Bouquet and Gold Bond powder, you hadn't even
 5 tested them after a year, had you?
 6 A. No, I don't think so.
 7 Q. Is that true?
 8 A. That's true.
 9 Q. And when these three plaintiff law firms came
 10 to you -- and they paid you to test the Johnson's Baby
 11 Powder; right?
 12 A. Yes, sir. Like with all clients, when we agree
 13 to do work, we -- we will bill them for our work.
 14 Q. And when these three plaintiff law firms came
 15 to you, Doctor, and they paid you to test the bottles
 16 of Johnson's Baby Powder, they asked you to look for
 17 amphiboles; right?
 18 A. Yes, sir.
 19 Q. And plaintiffs' attorneys didn't say to you,
 20 look for asbestos or asbestiform amphibole, they just
 21 told you to look for amphibole; right?
 22 A. I'm trying to remember back. They were just,
 23 you know, look to see if there's any regulated asbestos
 24 in the product is what I believe happened. And that's
 25 what we did. We didn't choose or pick what regulated

1 asbestos was in there. We just analyzed what was
 2 there.
 3 Q. Doctor, do you remember testifying in a case
 4 called *Blinkinsop*?
 5 A. Yes, sir, I think so.
 6 MR. CALFO: Your Honor, just to make this --
 7 we're getting to the end of the day -- may I show the
 8 witness the testimony to see if it refreshes his
 9 memory?
 10 MR. SATTERLEY: Can I get a copy?
 11 MR. CALFO: Of course. You can look at it.
 12 THE COURT: What page are you showing?
 13 MR. CALFO: I'm showing the witness page 215.
 14 MR. SATTERLEY: 250?
 15 MR. CALFO: 215.
 16 BY MR. CALFO:
 17 Q. Doctor, please just look at page -- lines 10
 18 through 12, okay? And let me just ask you this,
 19 Doctor: The plaintiffs' lawyers didn't ask you to look
 20 for asbestos, they asked you to look for amphiboles;
 21 right?
 22 A. That's what it states, yes.
 23 Q. And not all amphiboles are asbestos; true?
 24 A. That's true.
 25 Q. In fact, there are asbestos varieties that --

1 maybe I'll do it this way: You've seen the chart of --
 2 have you -- well, let me -- let me publish what -- we
 3 can't publish it until I get --
 4 THE COURT: That's the one you used in opening
 5 statement?
 6 MR. CALFO: Yes, Your Honor.
 7 THE COURT: You can publish it.
 8 BY MR. CALFO:
 9 Q. This is just for -- Doctor, I want you to help
 10 us educate the jury real quickly, if we could.
 11 Now, asbestos varieties are on the left and
 12 nonasbestos varieties are on the right.
 13 Do you see that, sir?
 14 A. I see that's what it states.
 15 Q. And, for some, the asbestos version and
 16 nonasbestos versions have different names; right,
 17 Doctor?
 18 A. Yes, sir.
 19 Q. So, for example, if we look on the right, the
 20 nonasbestos form is called riebeckite and the asbestos
 21 form on the left is crocidolite; right, Doctor?
 22 A. That's what it states.
 23 Q. And there are asbestos types of tremolite and
 24 nonasbestos types of tremolite; right, Doctor? Just
 25 generally.

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1 A. Well, yeah, depending if it's just pieces of
2 rock of tremolite versus fibrous, that would be
3 correct.
4 Q. So let me just ask it. There are asbestos
5 types of tremolite, there are nonasbestos types of
6 tremolite; right, Doctor?
7 A. Yes. The same mineral, the same chemistry,
8 same everything except one is pieces of rock, the other
9 is fibrous.
10 Q. And sometimes the nonasbestos tremolite can be
11 referred to as common or massive tremolite; right?
12 A. Sometimes, yes.
13 Q. And sometimes nonasbestos tremolite can be
14 referred to as just tremolite; right?
15 A. Typically not, at least not in my area. When
16 you say "tremolite," you either have to define it as
17 tremolite nonasbestiform or cleavage fragment tremolite
18 or tremolite asbestos. Not called just "tremolite." I
19 don't agree with that.
20 Q. Well, let me -- let me just ask you this:
21 There are asbestos types of anthophyllite; true?
22 A. Fibrous anthophyllite, which is asbestos.
23 Q. And nonasbestos types of anthophyllite; true?
24 A. True if it is, in fact, pieces of cleavage
25 fragment, not fibrous, that's true.

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1 Q. And so, Doctor, if you were asked to look for
2 amphiboles and not asbestos, what you were asked to do
3 is look for any of the amphiboles, not just on the left
4 side but also the nonasbestos versions; right?
5 A. We looked to characterize it if it had cleavage
6 fragments versus asbestos. We -- we characterize what
7 is present. Not just looking for one thing or the
8 other.
9 Q. Well, staying with this chart, you also were
10 not asked to look for chrysotile asbestos, were you?
11 A. It's been too long. I just don't recall.
12 Q. Maybe we can talk about that tomorrow, because
13 we've got four minutes.
14 Now, Doctor, we've heard and will likely hear
15 of testing --
16 MR. CALFO: And maybe, since we don't have
17 time, I'll move on, Your Honor.
18 THE COURT: It's your cross-examination.
19 MR. CALFO: So I move to strike the question.
20 BY MR. CALFO:
21 Q. Doctor, you've analyzed about a hundred bottles
22 of Johnson's talcum powder; right?
23 A. 107.
24 Q. And you've never reported finding any
25 chrysotile; right?

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1 A. That's correct. You wouldn't for this -- using
2 this protocol.
3 Q. And that's because one of the drawbacks of the
4 concentration method -- or I think you called it the
5 Blount method; is that right?
6 A. Well, there's the concentration method, Blount
7 PLM, and then ISO 22262-2 is the talc heavy density
8 liquid method for PLM, TEM, and SEM.
9 Q. So where I'm going with this is one of the
10 drawbacks of the concentration method is you can't find
11 chrysotile; right?
12 A. That's correct.
13 Q. So now, I think you also conduct PLM tests
14 without the concentration method; is that true?
15 A. That's true.
16 Q. And to this day, using that method, you still
17 haven't found chrysotile in the Johnson's talc; true?
18 A. That's true.
19 Q. And one thing I think you criticized Johnson &
20 Johnson for doing was not adopting the concentration
21 method. Right?
22 A. That's right.
23 Q. To this day, the concentration method has not
24 been adopted or approved by any regulatory agency in
25 the United States; right, Doctor?

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1 A. That is correct.
2 Q. That would include the EPA; right?
3 A. Heavy density liquid they don't recommend, but
4 they do have other concentration methods that they have
5 laid out from acid dissolution to remove soluble
6 materials to muffle furnace to remove polymer or
7 plastic-type materials. So it concentrates, just not
8 heavy liquid density.
9 Q. That would include the Mine Safety and Health
10 Administration; correct, Doctor?
11 A. That is correct.
12 Q. And that would include the Occupational Safety
13 and Health Administration, or OSHA; true?
14 A. That is true.
15 Q. All right.
16 MR. CALFO: Your Honor, I'm going into a new
17 area. Would this be an appropriate time? I hate to
18 ask the Court, but I am --
19 THE COURT: We'll go home on that one.
20 MR. CALFO: Thank you, Your Honor.
21 THE COURT: Ladies and gentlemen, we're going
22 to end for the day. We'll see you back here tomorrow
23 morning. We'll get started again with the
24 cross-examination of this same witness.
25 Have a pleasant evening. Don't forget the

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1 admonition that it's your duty as jurors not to
2 converse amongst yourselves or with anyone else on any
3 subject connected with the trial or to form or express
4 any opinion thereon until the matter is submitted to
5 you.
6 Have a pleasant evening.
7 (Whereupon, the following proceedings were held
8 outside the presence of the jury:)
9 THE COURT: The jurors have departed the
10 courtroom.
11 THE WITNESS: Your Honor, may I be excused?
12 THE COURT: Until tomorrow. You've got to be
13 back here.
14 THE WITNESS: Oh, I'll be back.
15 MR. SATTERLEY: Leave everything except your
16 report -- anything you brought you can take with you.
17 Anything that was presented to you, leave it.
18 THE WITNESS: It's right here. I haven't taken
19 any of that.
20 THE COURT: All right. Is there anything we
21 need to put on the record regarding today's proceeding?
22 MR. SATTERLEY: The only thing, at the end of
23 the day, Your Honor said, the Scala exhibits --
24 THE COURT: We'll get to that.
25 Mr. Calfo, Mr. Sharp, is there anything we need

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1 to put on the record?
2 MR. GARY SHARP: No, Your Honor.
3 MR. MULARCZYK: No, Your Honor.
4 THE COURT: All right. Let's move on to the
5 exhibits that Mr. Satterley would like to offer into
6 evidence.
7 What would you like to offer into evidence,
8 Mr. Satterley?
9 MR. SATTERLEY: I'm sorry?
10 THE COURT: What would you like to offer into
11 evidence?
12 MR. SATTERLEY: Your Honor, I apologize. I
13 don't have at my fingertips the disputed exhibits here.
14 Yes.
15 The disputed exhibits are Trial Exhibit 3573,
16 3574, 3577, 3578, 3580, 3581, 3582, 3588, 3590, 3592,
17 3593, 3594, 3595, 3596, 3597, 3599, 3600, 3601, 3603.
18 3604, and 3611.
19 THE COURT: All right. You can keep that.
20 MR. MULARCZYK: Do you have a set of the
21 documents to look at as we go through each one? Okay.
22 THE COURT: All right. Do you have any
23 objection to those?
24 MR. MULARCZYK: Yes, Your Honor. It would help
25 me -- I don't have that list in front of me. I have

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1 the ones that we've submitted objections to based on
2 the exhibit number for the deposition. If we could
3 go --
4 THE COURT: I can coordinate.
5 Number 6 on the Scala deposition is 3573.
6 MR. MULARCZYK: Correct. Our objection to this
7 is based on authenticity, hearsay, and relevance.
8 THE COURT: All right. First -- the first
9 thing is that -- authenticity. The witness testified
10 that this is a document from the National Safety
11 Council but claimed that she'd never seen it before.
12 MR. MULARCZYK: And part of the problem with
13 almost all of the documents to which we've objected to
14 is exactly that position. They were documents that
15 were put in front of her that she'd never seen before,
16 and so --
17 THE COURT: I understand. Ms. Clancy or
18 Mr. Satterley, what is the authenticity that has been
19 demonstrated to the Court regarding Exhibit 3573?
20 MR. SATTERLEY: Your Honor, this was produced
21 by Colgate in response to discovery, number one.
22 Number two, we cite to the Evidence Code 1414. It's
23 authentic because it's in a monthly periodical and
24 Colgate has admitted that they're continuously a member
25 of the National Safety Council since 1911. We believe

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1 that, because it was in a monthly periodical, that is a
2 presumption of authenticity. And so we believe this is
3 admissible. And we cite to, I think, in our -- the
4 *Greenspan* case and also to the *StreetScenes v. ITC*
5 *Group* case, 103 Cal.App.4th 233. As well as Evidence
6 Code Section 645.
7 THE COURT: Okay. You're mixing more than just
8 authenticity here. That's okay.
9 Mr. Mularczyk, why isn't this a document that
10 was in the possession of your client who was a member
11 of the organization that published this document and
12 why isn't it relevant to show what they knew and when
13 they knew it?
14 MR. MULARCZYK: Well, to address the first
15 point, nothing that Mr. Satterley said is actually
16 evidence. There is -- nobody has testified that this
17 was a monthly periodical, that Colgate was receiving
18 it, that Colgate was aware of it. This was a document
19 that was passed in front of Ms. Scala for the first
20 time in front of her deposition, and then --
21 THE COURT: I understand. She's testifying for
22 Colgate, and it was in Colgate's possession, but she'd
23 never seen it before.
24 MR. MULARCZYK: Nobody has said that. There's
25 been no evidence --

1 THE COURT: Mr. Satterley just told me that it
 2 was produced by Colgate in the production of documents.
 3 MR. MULARCZYK: As an attachment to the
 4 exhibit. As an exhibit to her deposition transcript.
 5 We produced her deposition transcript in the exhibit
 6 that was attached to it.
 7 What's important --
 8 THE COURT: Oh, all right. Let me get that
 9 straightened out.
 10 Mr. Satterley, was this produced by Colgate in
 11 a request for production of documents or was this
 12 produced by you at the deposition and then?
 13 MR. RIVAMONTE: Your Honor, Ian Rivamonte for
 14 the plaintiff. It was produced by Colgate in response
 15 to plaintiff's document requests as set forth in our
 16 brief.
 17 MR. MULARCZYK: Let me make something clear.
 18 The document production --
 19 THE COURT: You had it in your possession to
 20 produce it; right?
 21 MR. MULARCZYK: We received this because we had
 22 a copy of her transcript with the exhibits attached to
 23 her transcript. That's how we received a copy of this.
 24 I think it's --
 25 THE COURT: Wait. I'm hearing two different

1 things. I'm hearing that the lawyers for Colgate
 2 brought it to Ms. Scala's deposition.
 3 MR. MULARCZYK: No.
 4 THE COURT: Isn't that what you just told me?
 5 MR. RIVAMONTE: No, Your Honor. During
 6 Ms. Scala's deposition, it was the plaintiffs' counsel
 7 in that case. The *Polakow* case that brought it.
 8 THE COURT: I don't much care who produced it.
 9 Unless it was Colgate.
 10 MR. RIVAMONTE: Colgate did produce it,
 11 Your Honor, in response to plaintiff's discovery
 12 request in this case.
 13 THE COURT: Got it. Okay.
 14 All right. Mr. Satterley, how is this an
 15 authentic document?
 16 MR. SATTERLEY: Well, we -- number one, we
 17 believe that they produced --
 18 THE COURT: They haven't admitted it.
 19 MR. SATTERLEY: No, I don't believe they have
 20 admitted it. We believe that they produced it in
 21 response to our discovery request asking to produce all
 22 documents regarding what they knew or should have
 23 known, and they produced this document.
 24 They should have or could have as -- not
 25 produced it and said they didn't. It's not a document.

1 It is a periodical. The Court -- you know, there's --
 2 I apologize, Mr. Rivamonte, I've been working
 3 with Dr. -- asking questions of Dr. Longo all day, so
 4 my mind's -- beside myself right now. Can you help me
 5 out.
 6 MR. RIVAMONTE: Yes, I can.
 7 May I, Your Honor?
 8 THE COURT: Sure. Of course.
 9 MR. RIVAMONTE: So Evidence Code Section 645.1
 10 has a presumption that a periodical published more than
 11 regular issue in average intervals not exceeding three
 12 months is presumed authentic.
 13 Here, Your Honor, Exhibit 35' -- I believe it's
 14 3573 or Scala Exhibit 6, if you look at the contents
 15 page of that, if you look at my trial brief, the
 16 plaintiff's trial brief, my declaration, Exhibit E, the
 17 contents page says that it's a monthly periodical of
 18 the National Safety Council. Therefore, under Evidence
 19 Code 645.1, there is a presumption that it is authentic
 20 and now the burden shifts to Colgate to prove that it
 21 is not.
 22 THE COURT: All right. Presuming that it's an
 23 authentic periodical, how is it relevant when the
 24 corporate representative testifies that she doesn't --
 25 she's never seen it before? Colgate has never seen it

1 before.
 2 MR. SATTERLEY: Knew or -- okay.
 3 MR. RIVAMONTE: Your Honor, it is relevant to
 4 know this. In *People v. ConAgra*, *ConAgra* was -- for
 5 example, in that case, *ConAgra* was a member of several
 6 trade organizations. Those trade organizations issued
 7 periodicals and other reports about the hazards related
 8 to *ConAgra*'s product. In that case the appellate court
 9 found that, for the purposes of notice, those -- those
 10 publications from those trade organizations in which
 11 *ConAgra* belonged in is deemed notice of knowledge of
 12 the actual hazard in the product. Here it is the same
 13 thing. National Safety Council, Colgate was a member
 14 and therefore there is at least notice here since
 15 Colgate was a member that -- of asbestos-related health
 16 hazards as set forth in that National Safety Council
 17 publication.
 18 THE COURT: Well, how do you bridge the gap
 19 between the witness testifying for Colgate that says
 20 that Colgate's never seen this before, that they didn't
 21 have it in their possession?
 22 MR. RIVAMONTE: Under --
 23 THE COURT: In *ConAgra* they had all that stuff
 24 in their possession, didn't they?
 25 MR. RIVAMONTE: Yes. But in

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1 *Anderson v. Owens-Corning*, the standard is knew or
2 should have known. So even though -- if Ms. Scala
3 claims that she does not -- or Colgate does not know of
4 this document in particular, it should have known it
5 based on its membership in the National Safety Council
6 during that time.

7 Colgate was a member of that council for, I
8 think since its inception, if I recall correctly.

9 And Colgate was also a member of several
10 committees in the National Safety Council, some of
11 which relate to asbestos, as I recall correctly.

12 So, for that reason, Your Honor, it's a
13 should-have-known standard. Knowledge would be great.
14 Actual knowledge would be fantastic, but we're not --
15 for purposes of notice and purposes of
16 *Anderson v. Owens-Corning*, the should-have-known
17 standard applies.

18 THE COURT: Is that correct about Owens' claim?

19 MR. MULARCZYK: No, Your Honor. You can't --
20 the way it works with authenticity and with the known
21 or knowable standard is you can't simply make the
22 argument and say so and then that's the case. That's
23 not how it works. You actually have to submit evidence
24 and make a connection between the defendant and the
25 topic or the harm or the injury that they should or

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1 should have been aware of. There is nothing in this
2 document, there is no evidence that's been presented in
3 this case that Colgate had receipt of this document,
4 that this document should have told Colgate anything or
5 that it should have advised him of any harm or injury.
6 There's just no connection here. There's nothing at
7 all.

8 MR. GARY SHARP: Your Honor, if I might,
9 because I've been around forever, I know these
10 documents from a historic state-of-the-art standpoint.
11 It's not true. Colgate is not mentioned anywhere in
12 any of the National Safety Council pages, either by way
13 of membership, either by way of board of directors,
14 either by way of membership on a committee. If
15 Mr. Rivamonte can show us that we were on a committee,
16 then we can have that discussion. I've never seen it.

17 We have a list of every publication that was
18 maintained by Colgate, which was attached to the
19 deposition as Exhibit Number 5, which has been admitted
20 into evidence, the National Safety Council or the
21 *National Safety News* does not appear on this list.

22 These were not within Colgate's possession.

23 THE COURT: All right. The objection is going
24 to be sustained on this one.

25 Let's move to the next one, 3574, Number 7.

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1 MR. MULARCZYK: The same.

2 MR. GARY SHARP: Same objection.

3 MR. RIVAMONTE: Your Honor, I would like to
4 reiterate here. At this stage we're talking about
5 authenticity. And it's a very low standard. The
6 question is whether the document produced or at issue
7 is fake.

8 THE COURT: The difficulty is that you have --
9 you may have a document that is an authentic newspaper
10 article, but you have a witness from the company saying
11 that they never saw it before, that the company had
12 never seen it before. That's the -- the difficulty is
13 not so much that it's -- it says that it's a magazine
14 article and, on the face of it, it says that it's
15 published more than X-number of times. But the problem
16 here is that there's evidently no evidence that Colgate
17 had it in their possession so that they can be charged
18 with having knowledge of what it said.

19 Maybe that wouldn't be true for *The New York*
20 *Times*, but for something like this, I'm going to
21 sustain the objection to that one as well.

22 Moving on. Your next one is 3577. The
23 objection is sustained on that one. That's my motion
24 in limine. Actually, let's go back.

25 Do you want to argue that one?

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1 MR. MULARCZYK: Well, Your Honor, I would...

2 MR. GARY SHARP: Again, Your Honor, we have
3 within our documents the volumes of the *New England*
4 *Journal of Medicine* that we maintained. It was well
5 after this date. We did not have this. It was not in
6 the possession of Colgate, and, again, there was no
7 reason for us to have had this document. Ms. Scala was
8 not aware of it until it was presented to her at
9 deposition.

10 MR. MULARCZYK: And, yes, this was the subject
11 of the motion in limine.

12 THE COURT: How does this -- we made a ruling
13 on the motion in limine that there would not be
14 children dying of inhalation of talcum powder, of
15 aspiration of talcum powder. The motion -- the
16 objection is sustained for 3577.

17 The next one is 3578, which is Number 11.

18 MR. GARY SHARP: Again, National Safety
19 Council, Your Honor.

20 THE COURT: And it was -- and the witness was
21 emphatic that this was not received by Colgate.

22 MR. RIVAMONTE: I stand by my previous
23 arguments, Your Honor.

24 THE COURT: So that's sustained as well.

25 The next one is 3580, an article from *The New*

1 *York Times*.
 2 It's certainly relevant.
 3 MR. GARY SHARP: Your Honor, we have no
 4 objection.
 5 THE COURT: All right. That one will be in
 6 evidence.
 7 (Whereupon, Plaintiff's Exhibit 3580 was
 8 admitted into evidence.)
 9 THE COURT: The next one after that is 3581,
 10 which is -- corresponds to Number 14, which is -- which
 11 are OSHA rules and regulations, which is -- it's the
 12 law.
 13 What would be your objection?
 14 MR. GARY SHARP: Your Honor, with respect to
 15 OSHA, I have no objection as long as the entire code
 16 section is attached.
 17 THE COURT: Now, this is...
 18 MR. SATTERLEY: Well, wait a second. I would
 19 object --
 20 THE COURT: It's three pages long.
 21 MR. SATTERLEY: I would object to them
 22 putting --
 23 THE COURT: Hold on.
 24 The exhibit is the exhibit.
 25 Do you have an objection to the way the exhibit

1 exists at this point in time? Is it only part of an
 2 exhibit that includes other relevant, pertinent
 3 material?
 4 MR. GARY SHARP: Your Honor, if we can meet and
 5 confer with plaintiffs. The problem is the copy I have
 6 I can't read it, and I think between us we should be
 7 able to come up with a clean copy.
 8 THE COURT: Maybe you should just let it go.
 9 The jury won't be able to read it either.
 10 MR. GARY SHARP: That is absolutely true and...
 11 THE COURT: In any event, I don't mind letting
 12 him talk about it, and if you want to get a cleaner
 13 copy, Mr. Satterley, you can do that.
 14 MR. GARY SHARP: Thank you, Your Honor.
 15 THE COURT: The next one is 3582, corresponding
 16 to Number 15. What's the objection to this?
 17 MR. MULARCZYK: Hearsay, Your Honor. It's
 18 just -- it's a report of finding by Dr. Lewin in
 19 testing that he had done, so we object on the basis of
 20 hearsay.
 21 THE COURT: All right.
 22 (Whereupon, Plaintiff's Exhibit 3582 was marked
 23 for identification.)
 24 MR. RIVAMONTE: Your Honor, this letter is
 25 admissible under the hearsay rules. Number one, it's

1 an ancient document. It's over 30 years old. In the
 2 *ConAgra* case again, the authors of this document is
 3 presumed to have known what they were talking about and
 4 it's been typically relied upon. And, number two, it's
 5 also admissible under the official -- the government
 6 records hearsay exception because this was a document
 7 drafted by the FDA and it's between two FDA employees.
 8 So under, I believe it's 1271, it is admissible for
 9 that purpose -- I'm sorry, 1280.
 10 THE COURT: It wasn't drafted by the FDA. It
 11 was directed to the FDA. It was drafted by Seymour
 12 Lewin, a professor of chemistry someplace.
 13 MR. RIVAMONTE: Let me check, Your Honor.
 14 3583, Your Honor.
 15 MR. SATTERLEY: No. 3582; right?
 16 THE COURT: This is 3582.
 17 MR. SATTERLEY: 3582. Exhibit 15.
 18 Here it is.
 19 MR. RIVAMONTE: So, Your Honor, this is also
 20 admissible for notice purposes because this document
 21 was produced by Colgate and it was in Colgate's
 22 possession at the time.
 23 THE COURT: It was produced by Colgate in
 24 the --
 25 MR. RIVAMONTE: Response to discovery,

1 Your Honor.
 2 THE COURT: All right. Is that right, that
 3 Colgate had this document in their possession?
 4 MR. MULARCZYK: No. Again, this is information
 5 that was received during the course of depositions of
 6 corporate -- corporate witnesses, so -- here's my --
 7 Here's another take I have on this, Your Honor.
 8 So there was a follow-up -- two follow-up
 9 studies that were done, one by Dr. Lewin and one by the
 10 FDA, on these exact same samples that they want to
 11 introduce into evidence now.
 12 So to the extent they're asking for this one to
 13 be admitted, there are two follow-ups that say the
 14 complete opposite in his final rulings that should be
 15 admitted as well.
 16 So to the extent that the Court is inclined, if
 17 this comes in, then it certainly opens the door to all
 18 of it, but our position -- the position we're
 19 maintaining is that this was produced as part of
 20 deposition transcripts when these documents were shown
 21 to corporate representatives at depositions. What we
 22 produced were the transcripts along with the exhibits
 23 that were previously produced by plaintiffs. These
 24 were not in possession of Colgate prior to that time.
 25 So, in our view, that's the position we

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1 maintain, but -- leave it at that.
2 THE COURT: All right.
3 MR. SATTERLEY: I just want to verify. So it's
4 Colgate's position that, even though it's produced in
5 response to discovery with the Quinn Emanuel Bates
6 Number QECPC2, and it has several numbers, it's
7 Colgate's position that those Bates numbers don't mean
8 anything, and I just want to clarify that's Colgate's
9 position with regard to this because it was our
10 understanding that that came from the repository with
11 the Bates numbers on it. But now Colgate has taken a
12 new position I've never heard of before.
13 THE COURT: Well, I am just trying to figure it
14 out here. Did this...
15 MR. GARY SHARP: Your Honor.
16 THE COURT: Which is it?
17 MR. GARY SHARP: So, under discovery
18 obligations, a --
19 THE COURT: I understand that. The question
20 is --
21 MR. GARY SHARP: What we received in the course
22 of litigation these were not in the Colgate files.
23 These were received during the course of litigation by
24 counsel and then were attached to depositions where
25 people have been asked about them.

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1 THE COURT: All right. Mr. Satterley?
2 Mr. Satterley, did you receive this as a business
3 record or just one of those general "all documents that
4 you may have"?
5 MR. SATTERLEY: Well, Your Honor, they were
6 produced in response to our discovery and I -- you
7 know, it sounds like its Colgate's position that
8 there's no identifying marks or numbers or Bates
9 numbers that would demonstrate what they are. So we
10 believe that it's -- the one that I have -- I have one
11 with Bates numbers on them. His copy doesn't have
12 Bates numbers on them. Mine has Quinn Emanuel Bates
13 numbers on them.
14 MR. GARY SHARP: And, Your Honor, in the --
15 MR. SATTERLEY: So it's my -- other Colgate
16 counsel told me in the past that if it has the Quinn
17 Emanuel Bates numbers on it, it's part of their
18 repository, but it's now Colgate's taken the position,
19 that's fine. That just puts me on notice where they
20 are with regards to other documents, so.
21 THE COURT: All right. So I'm going to accept
22 as true that they did not have this document back in
23 1972.
24 MR. SATTERLEY: If we prove otherwise, we'll
25 bring it to the Court for reconsideration.

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1 THE COURT: All right. And so that one the
2 objection is sustained.
3 The next one is 3588, which corresponds to 21,
4 which is the CTFA minutes.
5 What's the objection to this?
6 MR. GARY SHARP: Your Honor, this is a CTFA
7 document. We're not going to challenge authenticity
8 because I'm assuming at some point somebody from the
9 CTFA has probably produced this. It was not a document
10 that was ever in the Colgate files. This document
11 actually came from Whittaker Clark & Daniels. We are
12 not challenging authenticity, though, however.
13 THE COURT: Wasn't the testimony that Colgate
14 was involved with this CTFA?
15 MR. GARY SHARP: Yes. Colgate was a member of
16 the CTFA. This happens to be something that Colgate
17 was not present at and there is no indication that this
18 document was ever sent to and/or received by Colgate.
19 MR. MULARCZYK: And, as a matter of course, we
20 stipulate on the CTFA documents where it indicates we
21 were present. We don't dispute those. The ones that
22 raise concern for us are the ones in which we weren't
23 present.
24 THE COURT: All right. I am persuaded that it
25 should be allowed in. So the objection is overruled.

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1 (Whereupon, Plaintiff's Exhibit 3588 was
2 received into evidence.)
3 The next one is 3590, which corresponds to 23.
4 MR. RIVAMONTE: This is another CTFA document,
5 Your Honor. It's a news release.
6 THE COURT: Is there an objection to this one?
7 MR. GARY SHARP: Other than your name is on it.
8 But no, Your Honor.
9 THE COURT: I also find that objectionable.
10 MR. GARY SHARP: Let the record reflect there
11 was laughter in the courtroom.
12 THE COURT: That one will be in evidence.
13 (Whereupon, Plaintiff's Exhibit 3590 was
14 received into evidence.)
15 THE COURT: The next one is 3592. The Sinai
16 study.
17 What's the objection to this one?
18 MR. MULARCZYK: Same thing as for Dr. Lewin.
19 It's hearsay.
20 MR. SATTERLEY: Well, Your Honor, this is --
21 this goes to notice, exception to the hearsay rule,
22 issue of notice. This is a published study regarding
23 the very product at issue in this case, that the
24 corporate representative admitted that they knew that
25 it was going on at the time, and this, at the very

1 least, should come in for the issue of notice.

2 MR. RIVAMONTE: Similar to *The New York Times*
3 article, Your Honor. This is a publication in a
4 medical journal -- or a scientific journal, I should
5 say.

6 MR. SATTERLEY: *Journal of Toxicology and*
7 *Environmental Health*.

8 THE COURT: It's really a question of whether
9 they had notice at the time, and I'm persuaded that
10 they had notice at the time.

11 MR. GARY SHARP: Your Honor, if I might, this
12 is similar to every medical article which might come up
13 in a trial with respect to medical, and they're
14 referred to, certainly. They're quoted from. They
15 don't come into evidence because they're still
16 inadmissible hearsay.

17 THE COURT: I don't disagree with that, but the
18 distinguishing factor is that with the Sinai group it
19 was a *New York Times* article and then there was
20 interaction between the industry group and the people
21 who wrote the article.

22 MR. GARY SHARP: Certainly.

23 THE COURT: And that's where it distinguishes
24 this, that it was a bone of contention and it was
25 maneuvering, if you will, around what was -- what was

1 printed.

2 MR. GARY SHARP: Well, again, Your Honor, what
3 we're doing is we're now sending back to the jury room
4 to lay people medical or scientific articles that have
5 been testified to by the experts and have been
6 explained by the experts. We don't send the textbooks
7 or the articles back to the jury room.

8 THE COURT: I agree with that. This isn't one
9 of those.

10 MR. GARY SHARP: Thank you, Your Honor.

11 THE COURT: This is something that was
12 published, that the industry group addressed it. And
13 it's the fact that the industry group addressed it that
14 makes it what's in there. And it is hearsay, no
15 question about it. But it goes to notice, not to the
16 truth of the matter.

17 MR. GARY SHARP: Thank you, Your Honor.

18 THE COURT: So that's 3592 -- and, actually,
19 3593 can both be admitted into evidence, because I'm
20 going to presume that it is the same.

21 (Whereupon, Plaintiff's Exhibit 3592 was marked
22 for identification.)

23 (Whereupon, Plaintiff's Exhibit 3593 was
24 received into evidence.)

25 MR. GARY SHARP: And that's for notice only;

1 correct, Your Honor?

2 THE COURT: The next one is 3594, which is 27.

3 MR. MULARCZYK: So the objection to this,
4 Your Honor, it is hearsay within hearsay. It's a
5 document that purports to describe a telephone
6 conversation.

7 MR. GARY SHARP: Again, it's not a Colgate
8 document and it's never appeared in the Colgate files.

9 THE COURT: We have somebody, looks like it's
10 named Shapiro, and we have Langer. Beyond a doubt,
11 it's a hearsay document; right?

12 MR. RIVAMONTE: Your Honor, in our trial brief
13 we submitted a declaration from the custodian of
14 records from the FDA, and that declaration
15 authenticates this document, number one; and, number
16 two, confirms that this document was kept in the
17 regular course of the FDA.

18 So in that sense, Your Honor, it's admissible
19 as a business record, under the business record
20 exception. It's also --

21 THE COURT: This is a government record?

22 MR. RIVAMONTE: It is maintained as a
23 government record, yes, Your Honor. It's part of the
24 FDA files as a declaration from the FDA. It's attached
25 as an exhibit.

1 THE COURT: So it's an FDA business record.

2 MR. RIVAMONTE: Yes. It was kept in the
3 regular course of the FDA's business.

4 THE COURT: Where is the evidence that shows
5 that?

6 MR. RIVAMONTE: Let me look it up, Your Honor.

7 MR. SATTERLEY: The declaration we submitted, I
8 believe.

9 MR. RIVAMONTE: It was part of the trial brief.
10 It was in my declaration. I will give you the exact
11 exhibit number.

12 THE COURT: All right. If it's a business
13 record and it's been authenticated by a declaration.

14 MR. MULARCZYK: Well, it seems like that only
15 addresses the first layer of hearsay and not the
16 underlying telephonic conversation. The business
17 record exception is that it actually exists only
18 applies to the document itself. It doesn't apply to
19 the second layer of hearsay within the document which
20 describes the underlying telephonic conversation, which
21 is actually the title of the document itself.

22 MR. RIVAMONTE: Your Honor, just for the
23 record, it's Exhibit V as in Victor to my declaration.
24 It is a declaration of Tobin Ballinger, and in that
25 declaration, in that Exhibit B, there is an

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1 authentication page by the FDA certifying that this
2 document, along with others, is part of -- maintained
3 in the regular course of the FDA's business.

4 In terms of the --

5 THE COURT: You didn't -- did you subpoena the
6 document to court and -- with the declaration by the
7 custodian?

8 MR. RIVAMONTE: It was a FOIA request done by
9 my office and when the request was made --

10 THE COURT: All right. So it's a Freedom of
11 Information Act request and they sent it back saying
12 these are the documents we have.

13 MR. RIVAMONTE: Yes, Your Honor.

14 THE COURT: That's insufficient to authenticate
15 it. If you have a declaration of a custodian as would
16 come with documents that were subpoenaed to the Court
17 for trial, that would take care of the problem in terms
18 of authentication.

19 And that they also say that it's made in the
20 regular course and scope of business with the other
21 necessary assertions, it can get past the hearsay
22 objection. But it -- but I'm going to sustain the
23 objection on this one. I don't see that having
24 occurred.

25 The next one is 3595, which is the submission

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1 to the FDA.

2 MR. MULARCZYK: So, again, our objection to
3 this is authenticity.

4 THE COURT: How many pages are on this one?

5 MR. RIVAMONTE: It consists of two documents,
6 Your Honor. I think we only want -- it's kind of weird
7 because in the copy, as you'll see, there's one --
8 there's two documents per page.

9 THE COURT: Yes. I have four documents
10 altogether plus a page that does not make sense to me.
11 It says "remote user." That's right. Remote user.

12 MR. RIVAMONTE: So, Your Honor, we want the
13 McCrone document, which is dated March 12, 1976.
14 That's two pages.

15 And then we want the Johnson & Johnson --

16 THE COURT: Well. All right.

17 MR. RIVAMONTE: There's three documents total,
18 total of four pages.

19 THE COURT: There has been testimony that these
20 were the documents that were sent by the trade group,
21 the CTFA, in order to influence the FDA; isn't that
22 what the testimony was?

23 MR. MULARCZYK: I don't recall that testimony,
24 Your Honor. And I would -- one is a Johnson & Johnson
25 document. One is a McCrone document that wasn't a

1 communication with Colgate. I think we have challenges
2 to authenticity as to both. We have challenges to
3 hearsay as to both. And I believe one of the documents
4 actually discusses a -- the McCrone document also seems
5 to reference a verbal agreement that was made, so
6 there's a multiple hearsay layer issue with respect to
7 the McCrone document.

8 THE COURT: Well, my recollection of testimony,
9 and I'm blanking out at the moment as to who gave the
10 testimony, was that the trade group put together a
11 package of letters regarding the incorrect assertions
12 in the Sinai Medical School study and it was sent to
13 the FDA. But maybe I'm not correct about that.

14 MR. SATTERLEY: I think you're correct. Diana
15 Scala testified about that. And also there's testimony
16 that hadn't already been played from Mr. Hopkins on
17 that -- in that regard.

18 THE COURT: Maybe it was Mr. Hopkins'
19 testimony. I don't remember exactly whose testimony it
20 was. But that's my recollection. And if that's --
21 if -- with that testimony underpinning this, I will
22 admit it into evidence.

23 The next one is 3596, the CTFA minutes.

24 MR. MULARCZYK: Your Honor, just as a
25 clarification on the last one, which document are you

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1 admitting? Or subject to the testimony, because
2 there's a few in there.

3 THE COURT: There's -- there are three letters.

4 MR. MULARCZYK: Okay.

5 THE COURT: And one of them is from Johnson &
6 Johnson, one of them is from McCrone, and one of them
7 is from Sterling Drug. And the other page that says
8 "remote user," I don't know what that means.

9 Mr. Satterley?

10 MR. MULARCZYK: It has a little note --

11 MR. SATTERLEY: We don't need that.

12 MR. MULARCZYK: I think that's a little note
13 left by the plaintiff's attorney.

14 MR. SATTERLEY: I don't, but we don't -- we
15 won't seek the admission of that, Your Honor.

16 THE COURT: All right. We're going to tear
17 that out.

18 MR. MULARCZYK: Just like that.

19 THE COURT: Just like that. All right.

20 MR. MULARCZYK: We'll -- and we'll -- we'll
21 check the -- we'll go back and check the testimony
22 that's underpinning the admission of these, and -- and
23 we'll circle back with the Court in the morning.

24 THE COURT: All right. 3596, CTFA minutes. If
25 you have no different objections, I'm going to admit

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1 that.
2 MR. GARY SHARP: Your Honor, what tab? I'm
3 sorry.
4 MR. SATTERLEY: 29, Mr. Simko. Colgate was
5 present, so --
6 MR. MULARCZYK: Yeah, we'll withdraw the
7 objection.
8 THE COURT: All right. That one will be in.
9 (Whereupon, Plaintiff's Exhibit 3596 was
10 received into evidence.)
11 THE COURT: The next one as well? 3597, which
12 is 30, which -- oh, maybe I'm confusing the letters.
13 MR. GARY SHARP: Yes. I -- now -- now that I
14 see this, I -- I believe that is what happened,
15 Your Honor.
16 MR. SATTERLEY: Yeah. This is the -- this is
17 the March submission to the FDA enclosing all the
18 industry members of the CTFA, and there was
19 testimony -- specific testimony about this, about
20 Christopher Costello working for Colgate.
21 THE COURT: These are the same letters as in --
22 except there's more of them here.
23 MR. SATTERLEY: That's correct.
24 MR. MULARCZYK: Can I -- can I get back to the
25 Court on this in the morning again, just review the

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1 testimony?
2 THE COURT: All right. Is there one from
3 Colgate?
4 MR. SATTERLEY: There's -- I have one --
5 there's a -- a letter and an internal -- a memo that
6 was submitted to the FDA; March 15, 1976, letter from
7 Costello to Norman Estrin, and Norman Estrin turns
8 around and submits all of this to the FDA.
9 MR. GARY SHARP: And, Your Honor, no objection
10 to those portions.
11 THE COURT: Well, the document is what the
12 document is. If you have objections to other portions,
13 we are going to deal with it, but first, let me do
14 this.
15 3595 I'm going to strike from being admitted
16 into evidence, because it's going to be duplicated
17 3597. So 3595 is out because it's a duplication.
18 3597 will be in, but the Court will reconsider
19 it if Mr. Mularczyk can find some evidence that nobody
20 talked about it.
21 (Whereupon, Plaintiff's Exhibit 3597 was
22 received into evidence.)
23 MR. MULARCZYK: I'm not -- I'm not looking for
24 a way out. I just want to confirm what the --
25 THE COURT: All right. The next one is 3599,

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1 Exhibit Number 32. It's a memorandum from HEW,
2 somebody there, to Robert Schaffner.
3 MR. GARY SHARP: Yes, Your Honor. Again, this
4 is an internal FDA document that has not been
5 authenticated.
6 MR. MULARCZYK: We object on that and on
7 hearsay.
8 MR. RIVAMONTE: Your Honor, this is one of the
9 documents that the FDA produced in response our FOIA
10 request. It's Exhibit V, as in Victor, to my
11 declaration in the trial brief.
12 THE COURT: Yeah. I think it's -- I don't
13 remember what the witness, Diana Scala, said about it.
14 Do you?
15 MR. GARY SHARP: It was just read to her,
16 Your Honor.
17 THE COURT: All right. It's not in evidence.
18 Then we have 3600, which is 33.
19 MR. GARY SHARP: Yes, Your Honor. In this --
20 this next series are allegedly to be call reports
21 that -- they're Cyprus documents. They are not Colgate
22 documents. They did not appear in Colgate files.
23 THE COURT: Well, the testimony, if I recall,
24 is that the witness said that Cyprus mailed these
25 things in an offer -- in attempting to solicit business

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1 from Colgate.
2 MR. GARY SHARP: No. Let me rephrase that,
3 Your Honor.
4 The testimony from Ms. Scala was -- again,
5 these were simply put in front of her, and she was --
6 they were read to her. These are -- nothing with
7 respect to Colgate or Colgate employees would verify
8 anything that's in this document from Cyprus.
9 And, again, this is a hearsay within hearsay,
10 because they purport to be conversations that took
11 place by a gentleman at Cyprus, who, apparently, was in
12 sales, and they've memorandums to his boss at the time
13 that they were attempting, apparently, to gain
14 Colgate's business, which they were not able to do
15 until they bought the company.
16 MR. SATTERLEY: Your Honor, first of all, many
17 of these documents have statements of what Colgate
18 personnel managers said. Those would be party
19 admissions, the portions of the documents. The
20 documents themselves have been authenticated --
21 THE COURT: They would be party admissions if
22 somebody was standing here to testify that "They told
23 me."
24 But what we have is a document that was written
25 a long time ago, and the witness that talked about the

<p style="text-align: right;">322</p> <p>1 document, if at all, doesn't say that "Somebody told 2 me."</p> <p>3 MR. SATTERLEY: These --</p> <p>4 THE COURT: That's a difficult problem from the 5 perspective of saying that it's a -- it's an admission.</p> <p>6 MR. SATTERLEY: These documents were all 7 produced as business records by Cyprus. We have 8 testimony from the Cyprus corporate representative we 9 could tender -- tender to Your -- to Your Honor, if we 10 haven't already done so.</p> <p>11 MR. RIVAMONTE: We have.</p> <p>12 MR. SATTERLEY: And so these are business 13 records from 19 -- this one is from 1976, and so we can 14 authenticate these as business records, and there are 15 statements of -- of a party within the business record.</p> <p>16 And it would be just -- if they had a record of 17 Ms. Schmitz --</p> <p>18 THE COURT: I don't have a problem with this 19 being a business record, but I need to see the evidence 20 from Cyprus that describes it as their business record.</p> <p>21 MR. SATTERLEY: We -- we provide will that to 22 Your Honor.</p> <p>23 MR. RIVAMONTE: Exhibit BB to my declaration, 24 Your Honor, is the deposition testimony of Henry 25 Mulryan, who was a -- who -- who worked for Cyprus and</p>	<p style="text-align: right;">324</p> <p>1 authenticates that, that's an exception to the hearsay 2 rule.</p> <p>3 MR. MULARCZYK: But the statement is being 4 made --</p> <p>5 MR. GARY SHARP: Your Honor, the statement 6 contained within this record is something the 7 plaintiffs wish to -- to show to prove the truth of the 8 matter asserted. So it is the hearsay statement within 9 the document that is the objection.</p> <p>10 I -- again, I'm not going to force them to read 11 a transcript for authentication. I believe these 12 are -- probably purport to be Cyprus documents. I have 13 no reason to believe that someone has done something to 14 them.</p> <p>15 It's the hearsay statements within those Cyprus 16 documents that -- that we're placing our objection, 17 because they -- it's a salesperson, who is trying to 18 get something to his boss to convince him to allow 19 making calls on Colgate that, apparently, are taking 20 hours and -- and lunches.</p> <p>21 THE COURT: Well --</p> <p>22 MR. GARY SHARP: They are seeking to have those 23 statements made by Colgate employees, allegedly, on a 24 third-hand basis as something to prove the truth of the 25 matter asserted.</p>
<p style="text-align: right;">323</p> <p>1 has personal knowledge about how these call reports are 2 generated in the normal course of Cyprus's business.</p> <p>3 MR. SATTERLEY: He was -- the president of 4 Cyprus was deposed. And also, if Your Honor will -- 5 may recall, his/he's the signator of one of the other 6 letters that --</p> <p>7 THE COURT: Are you going to read that to 8 the -- read that information to the jury because this 9 guy is unavailable?</p> <p>10 MR. SATTERLEY: We have designated 11 Mr. Mulryan's deposition. If the Court requires it for 12 foundation purposes, we certainly would.</p> <p>13 First, I think that its authentication as a 14 business record, as a preliminary matter, the Court 15 can -- can take that and determine itself that it's a 16 business record and otherwise admissible.</p> <p>17 But if the Court requires us to read that 18 portion of Mr. Mr. Mulryan's testimony, we certainly 19 can do that, if -- if need be.</p> <p>20 MR. MULARCZYK: I think Your Honor is still 21 going to run into the same problem, because it's not 22 going to be Mr. Mulryan saying, "This is what Colgate 23 told me."</p> <p>24 THE COURT: No, no, no. But if he identifies 25 the document as being a business record for Cyprus,</p>	<p style="text-align: right;">325</p> <p>1 MR. RIVAMONTE: Your Honor, if you look at the 2 recipient, who are -- who are -- the persons who took 3 part in this three-hour lunch in April 19, 1976 --</p> <p>4 THE COURT: I -- I -- I saw that.</p> <p>5 MR. RIVAMONTE: Yeah, Mr. Simko is in there.</p> <p>6 So Colgate employees were --</p> <p>7 THE COURT: My ruling is going to be that if we 8 can see that these are Cyprus -- genuinely business 9 records, then I will admit them into evidence.</p> <p>10 If they're not, the -- the other objection that 11 it's a hearsay document or a double hearsay document is 12 one that goes to something else. I mean, hearsay 13 doesn't apply if there is an exception to the hearsay 14 rule. Hearsay within hearsay, we can give them a 15 limiting instruction, if we need to.</p> <p>16 But -- so that would mean that 3600, 3601, 3603 17 are all in. And 3604 as well.</p> <p>18 (Whereupon, Plaintiff's Exhibit 3600 was 19 received into evidence.)</p> <p>20 (Whereupon, Plaintiff's Exhibit 3601 was 21 received into evidence.)</p> <p>22 (Whereupon, Plaintiff's Exhibit 3603 was 23 received into evidence.)</p> <p>24 (Whereupon, Plaintiff's Exhibit 3604 was 25 received into evidence.)</p>

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1 MR. GARY SHARP: And, Your Honor, we'll --
2 we'll draft proposed limiting instruction for the
3 Court.
4 THE COURT: I -- I have one that sort of aims
5 in this direction, and we can talk about it. Let's
6 finish this first, though.
7 MR. GARY SHARP: Thank you, Your Honor.
8 THE COURT: I also wanted to do one other
9 thing, is that counsel need not request leave of Court
10 to approach the witness every single time.
11 If you want to make the record clear, just say,
12 "I'm going to show you this document, Mr. Witness," and
13 then just --
14 MR. GARY SHARP: Thank you, Your Honor.
15 MR. SATTERLEY: We appreciate it, Your Honor.
16 MS. CLANCY: And then don't do it in a menacing
17 fashion. And then don't approach in a menacing
18 fashion.
19 THE COURT: Well, now I'm going -- I'm not
20 worried about that in this case.
21 Okay. So 3600, in; 3601, in; 3603, in; 3604,
22 that's also going to be in; 3605 -- 3611, which is
23 Number 44 --
24 MR. RIVAMONTE: It's the one with Mr. Roach.
25 THE COURT: Pardon?

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1 MR. RIVAMONTE: The one you mentioned earlier
2 this morning.
3 THE COURT: Oh, no, no, no. That's -- that's
4 not spelled like me. The other one --
5 MR. RIVAMONTE: Oh, the other one.
6 THE COURT: It's 3590 --
7 MR. RIVAMONTE: Oh, okay.
8 THE COURT: -- has printing in the upper
9 right-hand corner that looks, strangely, like mine with
10 the name F. Roesch, R-o-e-s-c-h, which is how you spell
11 my name. It's an unusual spelling. It's not real
12 common. But I'm not related.
13 Okay. Let's move on.
14 MR. SATTERLEY: Colgate did have a facility in
15 Berkeley, Your Honor.
16 THE COURT: Okay. So we have the -- this
17 McCrone document with a picture on it that's --
18 MR. GARY SHARP: Which tab are we at,
19 Your Honor? Which tab?
20 THE COURT: This is 44. It's a letter directed
21 to Ms. Grace Roach of the Colgate-Palmolive Company --
22 MR. SATTERLEY: I thought we agreed --
23 THE COURT: -- July 1983.
24 MR. SATTERLEY: I thought, Mr. Sharp --
25 MR. GARY SHARP: Yeah.

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1 MR. SATTERLEY: -- you -- you agreed to this
2 one; right?
3 MR. GARY SHARP: Yes.
4 THE COURT: All right. So that one will be in
5 evidence.
6 And that -- that completes that.
7 MS. CLANCY: That completes all the Scala
8 exhibits, Your Honor.
9 THE COURT: All right.
10 THE REPORTER: What -- what was Number 44 that
11 you just admitted? Was that 36- --
12 THE COURT: 3611.
13 MR. SATTERLEY: A letter from McCrone to
14 Ms. Grace Roach.
15 THE REPORTER: Okay. Thanks.
16 MS. CLANCY: Oh, Your Honor, may I just -- to
17 help the -- to assist the court reporter and the
18 Clerk -- I gave Mr. Satterley the wrong exhibit number
19 today on something. I just need to read it into the
20 record. I told him one of the exhibits that was
21 admitted was 727, but the actual exhibit number is
22 3591.
23 THE COURT: Okay.
24 MR. SATTERLEY: There was no objection at the
25 time, so I just rocked and rolled.

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1 THE COURT: Mr. Bir? Mr. Bir --
2 THE CLERK: Yes?
3 THE COURT: -- we are going to admit another
4 exhibit here.
5 MS. CLANCY: It was already admitted.
6 THE COURT: Oh, it was already admitted?
7 MS. CLANCY: I just read the --
8 THE COURT: So we need to delete one.
9 MS. CLANCY: When he said, "I'm now showing you
10 727," that's because I gave him the wrong sticky.
11 THE COURT: So -- all right. So both of those
12 are in evidence. They're just different documents?
13 MS. CLANCY: No. 727 is not evidence. It's
14 3591. And I had some sort of --
15 MR. SATTERLEY: It's the same document, though.
16 MS. CLANCY: It's the same, yeah.
17 MR. SATTERLEY: It's the J4-1 method; right?
18 MS. CLANCY: Yes.
19 It's the same document. I gave him the wrong
20 document number.
21 THE COURT: Okay.
22 MS. CLANCY: So I didn't want there to be
23 any -- I've made more confusion --
24 THE COURT: Well, now, I'm easily confused.
25 Okay. I have a -- a limited -- evidence

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1 admitted for limited purpose instruction that -- I'll
2 just show it to you. And if you -- if you want to --
3 MR. SATTERLEY: Can we get a copy, by chance,
4 Your Honor, or --
5 THE COURT: All right. Is there anything else
6 we need to talk about before we let the reporter go
7 home?
8 MR. SATTERLEY: The only thing is, there was
9 some evidentiary rulings Your Honor made -- evidentiary
10 rulings Your Honor made, I believe, regarding some
11 additional J&J documents, and earlier, I had requested
12 that they be received into evidence.
13 When I did that, it was at a break, and I
14 didn't hear Your Honor respond, "Okay, those are
15 received into evidence," like you did yesterday.
16 This morning you issued a ruling. It
17 was the --
18 THE COURT: What numbers are you talking about?
19 MR. SATTERLEY: These are Exhibit 4687, 0790,
20 407 --
21 THE COURT: Wait.
22 MR. SATTERLEY: And I'm reading from
23 Your Honor's order.
24 THE COURT: 4687?
25 MR. SATTERLEY: 4687, yes, Your Honor.

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1 THE COURT: That's in evidence.
2 MR. SATTERLEY: Yes. The -- so -- so I guess
3 the question is, I have a list here that Your Honor
4 signed yesterday --
5 THE COURT: Well, my Clerk is on the job.
6 MR. SATTERLEY: Okay.
7 THE COURT: If I signed that order, he put them
8 into evidence.
9 MR. SATTERLEY: Okay. That's all I wanted to
10 make sure.
11 THE COURT: And I'm looking at the list of
12 documents that the Clerk has as in evidence, and 4687
13 is there.
14 MR. SATTERLEY: Okay.
15 THE COURT: So I think that if we use that as
16 an exemplar, you are going to be fine.
17 MR. SATTERLEY: I was just making sure the
18 court reporter has it reflected on the transcript.
19 THE COURT: All right.
20 MR. SATTERLEY: Thank you, Your Honor.
21 MS. STEINMANN: Your Honor, what time would you
22 like us back tomorrow?
23 THE COURT: 9:00.
24 MR. SATTERLEY: And one last thing, because
25 Dr. Longo will be going in the morning, I'm going to

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1 meet and confer with defense counsel. Dr. Horn, I may
2 have to move him to either Thursday or Monday. I'll
3 send an email to counsel to let -- let them know about
4 that.
5 THE COURT: All right. We're in recess.
6 (Whereupon, Plaintiff's Exhibit 4687 was
7 received into evidence.)
8 (Whereupon, Plaintiff's Exhibit 790 was
9 received into evidence.)
10 (Whereupon, Plaintiff's Exhibit 407 was
11 received into evidence.)
12 (Whereupon, Plaintiff's Exhibit 670 was
13 received into evidence.)
14 (Whereupon, Plaintiff's Exhibit 679 was
15 received into evidence.)
16 (Whereupon, Plaintiff's Exhibit 3014 was
17 received into evidence.)
18 (Whereupon, Plaintiff's Exhibit 3088 was
19 received into evidence.)
20 (Whereupon, Plaintiff's Exhibit 5917 was
21 received into evidence.)
22 (Whereupon, Plaintiff's Exhibit 3573 was marked
23 for identification.)
24 (Whereupon, Plaintiff's Exhibit 3574 was marked
25 for identification.)

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1 (Whereupon, Plaintiff's Exhibit 3577 was marked
2 for identification.)
3 (Whereupon, Plaintiff's Exhibit 3578 was marked
4 for identification.)
5 (Whereupon, Plaintiff's Exhibit 3581 was marked
6 for identification.)
7 (Whereupon, Plaintiff's Exhibit 3594 was marked
8 for identification.)
9 (Whereupon, Plaintiff's Exhibit 3595 was marked
10 for identification.)
11 (Whereupon, Plaintiff's Exhibit 3599 was marked
12 for identification.)
13
14 (Whereupon, the proceedings
15 were concluded at 5:25 p.m.)
16
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1 STATE OF CALIFORNIA)
2) ss.
3 COUNTY OF ALAMEDA)
4

5 I, EARLY K. LANGLEY, do hereby certify:

6 That foregoing proceedings were held in the
7 above-entitled action at the time and place therein
8 specified;

9 That said proceedings were taken before me at said
10 time and place, and was taken down in shorthand by me,
11 a Certified Shorthand Reporter of the State of
12 California, and was thereafter transcribed into
13 typewriting, and that the foregoing transcript
14 constitutes a full, true and correct report of said
15 proceedings that took place;

16 IN WITNESS WHEREOF, I have hereunder subscribed my
17 hand on April 30, 2019.

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EARLY K. LANGLEY, CSR No. 3537
State of California

Exhibit 22

1	State of South Carolina	In the Court of Common Pleas
2	County of Hampton	
3	JAMES COLEMAN SIZEMORE, as)
4	Personal Representative of)
5	The Estate of JAMES CALVIN)
6	SIZEMORE, Deceased,)
7	Plaintiff,) 2016-CP-25-00440
8	- vs -)
9	BOWATER PAPER MILL, et al.,)
10	Defendants.)
11	County of Richland)
12	BETH-ANEE F. JOHNSON and)
13	JOHN W. GREENLEY, JR.,)
14	Plaintiffs,) 2018-CP-40-01781
15	- vs -)
16	JOHNSON & JOHNSON, et al.,)
17	Defendants.)
18	County of Richland)
19	CHARLES T. HOPPER and)
20	REBECCA HOPPER,)
21	Plaintiffs,) 2019-CP-40-00076
22	- vs -)
23	AIR & LIQUID SYSTEMS) May 7, 2019
24	CORPORATION, et al.,) TRANSCRIPT OF RECORD
25	Defendants.) PRETRIAL MOTIONS

1 B E F O R E:

2 **Chief Justice Jean Toal (Ret.)**, Supreme Court
Acting Circuit Court Judge

5 A P P E A R A N C E S:

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E x h i b i t s

For Plaintiff Beth-Anee Johnson:

Marked	Description	I.D.	Admitted
1	List of preadmitted exhibits	128	

For the Defendants:

<u>Marked</u>	<u>Description</u>	<u>I.D.</u>	<u>Admitted</u>
	None offered.		

1 (WHEREUPON, court convened with all parties
2 present and the following proceedings were had
3 commencing at 9:11 a.m.)

4 THE COURT: Crosby's motion for summary judgment.
5 Mr. Reid.

6 MR. REID: Thank you, your Honor. Good morning.

7 THE COURT: Good morning.

8 MR. REID: Your Honor, I think our motions for
9 summary judgment can be defined as one governed by the
10 Henderson case and Lorman case.

11 There is no exposure evidence against Crosby, and
12 Crosby is therefore entitled to summary judgment.

13 Mr. Sizemore was deposed twice in a 1999 case and
14 over ten days in a Louisiana case that was a
15 predecessor to this one in 2016. And the entirety of
16 what he said about Crosby was that he didn't remember
17 working with Crosby valves.

18 On top of that, there is no coworker testimony in
19 this case that any work was done by Mr. Sizemore on or
20 near a Crosby valve or near others who worked on a
21 Crosby valve.

22 Nothing the plaintiffs have submitted with their
23 brief creates any genuine issue of material fact for
24 trial. They have submitted to your Honor three
25 documents relating to three sites.

1 One is Ocone, where Mr. Sizemore stopped working
2 in 1972. In his deposition, he said he thought he had
3 insulation and gasket exposure at Ocone but did not
4 even generically say what sort of equipment or place
5 that that exposure took place. And we know from his
6 deposition that he did a lot of pipefitting, joining
7 pipes to other sections of pipe.

8 In addition to Mr. Sizemore's own testimony, they
9 have submitted testimony from two other gentlemen who I
10 am loath to describe as coworkers because they didn't
11 know Mr. Sizemore; rather, they also worked at Ocone
12 but in very different circumstances.

13 One is Steve Simpson. Mr. Simpson didn't begin at
14 Ocone until 1977, five years after Mr. Sizemore
15 departed that site. He never mentioned Mr. Sizemore in
16 his deposition.

17 And if the Court looks at page 297 to 298 of his
18 deposition, Mr. Simpson said he could not remember
19 working on or seeing anyone else work on a Crosby
20 valve. So that amounts to no evidence.

21 The other gentleman who worked at Ocone whose
22 testimony they have submitted is Mr. Taylor, who also
23 never mentioned Mr. Sizemore. Mr. Taylor started there
24 in 1972, so I suppose there's some potential for
25 overlap. But most importantly, Mr. Taylor said that

1 since Oconee was in a startup phase, there wasn't any
2 gasket or packing work performed in 1972.

3 There is also in the records submitted by the
4 plaintiffs some Crosby documents related to Florida
5 Power & Light. Crosby sold 13 valves each to five
6 different Florida Power & Light sites. Two of those 65
7 valves had asbestos, both at Sanford.

8 If the Court looks at Mr. Sizemore's deposition
9 testimony about Sanford, he never even mentions valves
10 at all, much less relief valves or Crosby relief
11 valves.

12 The third site on which they submitted some
13 documents is Fort Howard, a paper mill in Wisconsin.
14 And, specifically, what the plaintiffs have submitted
15 is a 1952 purchase order for four valves costing \$8. I
16 think that tells you something about the size of the
17 valves.

18 There's nothing in that purchase order suggesting
19 those valves had any asbestos on them. And while the
20 plaintiffs informed the Court that Mr. Sizemore worked
21 at that plant, they don't point out that he wasn't
22 there until 1986, 34 years after that purchase order
23 came out. So we don't know where those valves went, if
24 they were still there, if they were even in the same
25 building that Mr. Sizemore worked three and a half

1 decades later.

2 So, in short, I would ask the Court to consider a
3 quote from Lorman. The Court said: Appellants would
4 have us adopt a rule that if a plaintiff can present
5 any evidence that a company's asbestos-containing
6 product was at the workplace while the plaintiff was at
7 the workplace, a jury question has been established.

8 Lorman rejected that proposition and granted
9 summary judgment. The Court should here as well
10 because on this record, it would require speculation to
11 think that there could be any exposure that
12 Mr. Sizemore may have had to Crosby products.

13 So, for that reason, we move for summary judgment.

14 And as the Court knows, we also have a pending
15 motion on personal jurisdiction, and, of course --

16 THE COURT: I thought I had dealt with that,
17 Mr. Reid. Have I not?

18 MR. REID: Not in this case. I was here last
19 October. I think we had a hearing in the Nolan case on
20 that issue.

21 THE COURT: Uh-huh.

22 MR. REID: The contention in the plaintiff's brief
23 here is not that there's general jurisdiction but
24 rather specific jurisdiction.

25 I think it's clear from the U.S. Supreme Court

1 case we have cited in our brief that to establish
2 personal jurisdiction, they have to demonstrate that
3 there was Crosby product in this state, activity by
4 Crosby directed to the state that actually caused the
5 injury. For the very reasons I've cited about their
6 lack of evidence at Ocone, I think the Court is duty
7 bound to grant us that motion as well.

8 So I'll respond to any questions the Court may
9 have and may want to respond to the plaintiff's
10 argument, but that's it.

11 THE COURT: All right, sir. I'll go on and hear
12 from plaintiff, and you will certainly have a chance in
13 reply.

14 Mr. Branham.

15 MR. BRANHAM: Good morning, your Honor. Nice to
16 see you again.

17 THE COURT: Thank you. Same here.

18 MR. BRANHAM: Your Honor, as Mr. Reid said,
19 Mr. Sizemore was deposed twice in a 1999 case and then
20 over a course of, I believe it was, ten volumes in the
21 instant case.

22 And the one thing that is crystal clear from
23 Mr. Sizemore's testimony, both then and in this case,
24 is that he was an expert on boilers. All he did for
25 30 years was work on boilers and associated systems.

1 He knew more about boilers than any client I've ever
2 had. He was flown all over the country to handle
3 boilers.

4 Crosby's valves, the type that we're talking about
5 in this case, go on boilers. They're safety relief
6 valves. They are designed to relieve pressure when it
7 becomes too high.

8 What Mr. Sizemore said in his 2001 deposition at
9 page 67 when he was asked about boiler inspections and
10 whether he did those, and he repeatedly talked about
11 that, and he says down at the very last sentence at
12 line 18 through 20: And normally they would check or
13 replace the relief valves on the steam drum.

14 That's what we're talking about, relief valves on
15 steam drums. That's where they go. And so I agree
16 with Mr. Reid that he didn't say Crosby. He didn't.
17 And that's not any great surprise because they're
18 covered in asbestos, right? You don't see the name on
19 them. But he sure knew he was working on them.

20 So when you combine that with the fact that Crosby
21 sold not only to Ocone, but, according to their own
22 documents, they sold to Celanese, Diamond Shamrock,
23 Dupont, Exxon, Farmland, Fluor, Fiber Industries, Hurst
24 (phonetic) Fibers, Hercules, Marathon, PPG,
25 Westinghouse.

1 I didn't read them all off, but the ones I just
2 read are places Mr. Sizemore testified he worked.

3 THE COURT: And many of them in South Carolina.

4 MR. BRANHAM: Yes, your Honor.

5 So as your Honor knows, these cases are hard
6 because you are going back 50-some-odd years to connect
7 the dots. But that's exactly what we've done here.

8 Mr. Sizemore worked on boilers that had these
9 valves, and he specifically talks about doing boiler
10 inspections on these types of valves. The only
11 evidence -- the only evidence in this case is valves
12 sold by Crosby or manufactured by Crosby. So when you
13 put all of those things together, you have in fact
14 connected the dots.

15 And so both on the issue of personal jurisdiction,
16 we meet that test in terms of the frequency, proximity.
17 He's talked about working on these types of valves, and
18 he talked about now he normally did it, which certainly
19 infers frequency. And given his general testimony
20 about boiler work over the course of 50 years, I think
21 he more than surpasses the Henderson and Lorman
22 requirements, and for those reasons, I think you should
23 deny summary judgment.

24 THE COURT: Just so the record is clear -- and we
25 have all tried these cases a number of times now with

1 each other, but so the record in this particular case
2 is clear, Crosby valves are very specialty valves, and
3 they are, for the most part, safety release valves on
4 boilers or other steam-generated-type equipment,
5 correct?

6 MR. BRANHAM: So generally, yes, your Honor. The
7 only thing I would take issue with is they're some sort
8 of special, really nuanced valve, because there were a
9 number of manufacturers.

10 THE COURT: There are a number of different kinds
11 of valves, but what they make is a safety release
12 valve --

13 MR. BRANHAM: Relief.

14 THE COURT: -- of varying sizes and so forth.

15 MR. BRANHAM: Some as big as you can walk through
16 and some smaller.

17 THE COURT: Some smaller.

18 And the record in this case, from sales records
19 for Crosby for materials supplied by Crosby in
20 discovery, indicates sales of these type valves to
21 many, many different industries for which Mr. Sizemore
22 worked, correct?

23 MR. BRANHAM: So some are supplied by Crosby; some
24 are supplied by other defendants in the case. For
25 instance, we have got some documents from Foster

1 Wheeler which indicate Crosby valves.

2 THE COURT: Right. But Crosby valves are among
3 those that are sold to various -- to a multitude of
4 places in which Mr. Sizemore worked.

5 MR. BRANHAM: Yes, your Honor.

6 THE COURT: And at the times when Mr. Sizemore
7 worked there.

8 MR. BRANHAM: At or before.

9 THE COURT: All right. And that's your contention
10 as to why both the motion for dismissal for lack of
11 personal jurisdiction as well as the motion for summary
12 judgment should both be denied?

13 MR. BRANHAM: Yes, your Honor.

14 THE COURT: All right, sir.

15 Mr. Reid, any reply?

16 MR. REID: Your Honor, I think we're confined to a
17 record that's before the Court, and there's nothing in
18 this record that supports the suggestion that Crosby
19 valves are covered in asbestos, as Mr. Branham says.
20 That's just not there.

21 Secondly --

22 THE COURT: I don't think that's the -- I think
23 the averment about exposure has to do with the
24 gasketing and packing and other material within the
25 Crosby valve rather than, I think, the -- as I

1 understand it, the pertinence of the argument "covered
2 in asbestos" is an explanation for why Crosby was not
3 identified.

4 We know that Crosby's logo generally appears on
5 its valves, correct?

6 MR. REID: That's correct. And they're not
7 insulated, so he would have every reason to see the
8 Crosby logo if he was working anywhere near them.

9 Secondly, there are not any documents in this
10 record about Celanese, Dupont, or any of the other
11 places other than the ones I mentioned.

12 Third, most of our --

13 THE COURT: Has material been produced that is
14 available to plaintiff that plaintiff would --
15 plaintiff avers that they have material which has been
16 supplied by Crosby and others that presumably would be
17 introduced and used in evidence in this case that shows
18 a variety of sales by Crosby to a variety of different
19 companies that use boilers and other type equipment
20 that requires safety valves in South Carolina.

21 Is he incorrect about that?

22 MR. REID: Nothing has been put -- nothing was
23 submitted in connection with their summary judgment
24 motion, and I have not been provided anything of that
25 nature by the plaintiffs.

1 I want to point out that our typical valve on a
2 boiler was an H series valve, safety valve. And as the
3 records from the Florida plant suggest, it was
4 extremely rare for us to have an asbestos gasket. So
5 he could be near Crosby valves that are being worked
6 on. And the record doesn't support that he was. But
7 even if he was, most of our valves didn't have
8 asbestos. In fact, most didn't even have gaskets or
9 packing at all. Two out of 65 in Florida did, at a
10 site where he never even said the word valves.

11 And it's not like we have a monopoly, that we're
12 the only relief valve maker out there. He was asked
13 about other -- he mentioned other valve makers
14 generally, and we have got records of other safety-type
15 valves at some of these sites. So to suggest that
16 because there's some generic reference to relief valves
17 doesn't get you anywhere. We still have to guess what
18 sort of relief valve it is.

19 Moreover, there's not anyplace in this record
20 where he says he went in and did work on the internal
21 components of a relief valve. At one point he mentions
22 removal of a relief valve that apparently was sent off
23 elsewhere and calibrated. So there simply isn't a
24 record to support exposure.

25 In short, your Honor, this is a case that

1 illustrates the difference between conjecture and
2 speculation on one hand and inference on the other.
3 You can't just draw inferences from this record.
4 There's no -- there's nothing that would suggest that
5 it's more likely than not that he worked on a Crosby
6 valve. The jury would have to speculate, and in most
7 instances on multiple levels, to think there was
8 exposure.

9 So, in short, you know, this is their moment to
10 put forth the evidence to demonstrate to the Court what
11 it was that creates a general issue of material fact,
12 and they simply have not done it.

13 THE COURT: Thank you, Mr. Reid.

14 Well, as we know in motions for summary judgment,
15 the evidence is viewed in the light most favorable to
16 the nonmoving party, which in this case would be
17 plaintiff.

18 I believe that there is sufficient evidence in
19 this record to indicate a frequency, regularity, and
20 proximity to safety release valves, some of which sold
21 by Crosby in many places in which Mr. Sizemore worked
22 in South Carolina over a 47-year career, to indicate
23 exposure, potential exposure sufficient to meet, at
24 this moment in the proceedings, the requirements of
25 Lorman, and therefore I would deny the motion for

1 summary judgment.

2 Similarly, I will deny the motion to dismiss on
3 personal jurisdiction grounds for the same reasons,
4 that the record at this moment is sufficient enough to
5 move forward beyond a dismissal.

6 Now, that's the motions in limine.

7 Now, I will say this: Boy, have we jumped through
8 some hoops about trying to keep all this train on the
9 track.

10 At the moment, as we know, Hampton has cases for
11 the week of May the 13th. They do not have cases for
12 the week of May the 20th. We are scheduled at this
13 time. The jury has been summoned. And so while we
14 would be in a position to try this case beginning on
15 Monday, the 20th, and we have got the motions in limine
16 to deal with, here is what I would suggest we do -- but
17 I don't want to prevail on your kindness too much, both
18 Mr. Reid and Mr. McLeod from out of town. I know
19 you're anxious to dispose of this and get on to other
20 business that you have.

21 We can either go on and run through these motions
22 in limine now or we can do that after we finish with
23 J&J. I want to dispose of everything I possibly can
24 today so that these things -- each of these trains
25 stays on the track until we see what, if anything, we

1 can try.

2 So I'm going to turn to you-all first, Mr. Reid,
3 because you and Mr. McLeod come from afar, and ask what
4 you prefer.

5 MR. REID: Your Honor, the practical answer is I
6 have a 6:30 flight. So I would suggest perhaps just in
7 the event that there's some potential that it might
8 impact our case, that we move to Johnson & Johnson and
9 we'll --

10 THE COURT: That's great. If that's okay with
11 y'all. Thank you very much for accommodating me. So
12 we'll go on now and move to the Johnson & Johnson case.

13 And we'll come back to Sizemore, of course.

14 Madam Court Reporter, we're moving now to
15 Beth-Anee Johnson against Johnson & Johnson. And that
16 is a Charleston case.

17 That would be Mr. Chris Swett and others from
18 Motley Rice for plaintiff. And on defense side,
19 Mr. Louis Herns heads the defense team.

20 Take your time getting set up and when you're
21 ready, we'll proceed.

22 I'm sorry. I keep trying to make this case be
23 from Charleston. It's here.

24 The first thing would be the summary judgment
25 motions. Let me just be sure I have got my hand on

1 those.

2 MR. HERNS: We did not file a summary judgment
3 motion on behalf of Johnson & Johnson or Johnson &
4 Johnson Consumer, Inc.

5 THE COURT: You have no summary judgment motions?

6 MR. HERNS: Yes, ma'am. That's correct.

7 THE COURT: And, Mr. Swett, you have no summary
8 judgment motions?

9 MR. SWETT: Your Honor, there was originally, if
10 you saw some in the file. The retailers filed summary
11 judgment motions. It's since been dismissed.

12 THE COURT: And all that's out of the way. So we
13 can proceed to the various motions in limine and other
14 matters.

15 MR. SWETT: Yes, your Honor.

16 THE COURT: All right. Well, I have plaintiff's
17 motions in limine, then, and I'll start with those, if
18 everybody can stay on track with that.

19 All right. The first plaintiffs motion in limine
20 is the omnibus motion. I'll just tick down this thing,
21 and if we've got one that is contested, then we'll go
22 there.

23 The first is collateral source. Of course, the
24 collateral source including sources independent of
25 defendant here, including social security benefits,

1 including comp, I would grant the motion to exclude
2 them unless defendant has anything they wish to say
3 about that.

4 MR. HERNS: Excuse me, your Honor. I'd like to
5 introduce to you Mr. Matt Schroll from the Nelson
6 Mullins law firm in Baltimore. He will be arguing this
7 motion.

8 THE COURT: All right. You may proceed, sir.

9 MR. SCHROLL: Good morning, your Honor.

10 THE COURT: You're going to oppose this motion, as
11 I understand it?

12 MR. SCHROLL: I just want to introduce and state
13 for the record that there are a number of these that we
14 have agreed to already, and number 1 is one of them.

15 THE COURT: Okay. Very good.

16 MR. SCHROLL: If you wanted us to identify the
17 ones where I think we have stated --

18 THE COURT: That's good. Let me go through the
19 notebook so I can keep up.

20 One is agreed to.

21 Two is settlements with other defendants.

22 MR. SWETT: It's agreed to, your Honor.

23 THE COURT: Very good.

24 Three is the American Tort System.

25 MR. SWETT: It's agreed to, your Honor.

1 THE COURT: Four is the effect of claims on
2 insurance premiums.

3 MR. SWETT: It's agreed to, your Honor.

4 THE COURT: Five is asbestos companies in
5 bankruptcy.

6 MR. SWETT: That is agreed to.

7 I just want to make sure that that does include,
8 in fact, Imerys as well.

9 MS. BROWN: Yes, your Honor.

10 THE COURT: Yes. I understand the agreement would
11 be with regard to any company that's in bankruptcy,
12 right?

13 MS. BROWN: Yes, your Honor.

14 THE COURT: Very good.

15 6, any reference to any ruling by another court on
16 admissibility of the testimony of a witness.

17 MR. SWETT: Your Honor, they oppose this one. You
18 know, I'd certainly argue our position and then let
19 them state their position.

20 We don't believe that the fact that any other
21 judge or court has excluded an expert's testimony is
22 relevant in this case. You are the sole gatekeeper in
23 this court as to qualifying experts as to whether or
24 not they are qualified on a specific area.

25 The way we dealt with this specific issue in the

1 last trial was we agreed -- or all the parties agreed
2 that we could ask our expert: Well, you've been
3 qualified as an expert in this court. And that was
4 okay, but we agreed not to ask our expert, Well, have
5 you been recognized as an expert in other courts across
6 the country?

7 And based on the fact that we agreed not to ask
8 that, they agreed that therefore it wasn't necessary to
9 ask them if they have ever been excluded by any other
10 courts in the country, and we would be willing to make
11 that same agreement in this case.

12 THE COURT: That's the way we have done it before.
13 How about it, sir?

14 MR. SCHROLL: We agree to that.

15 THE COURT: Very good. So neither side will
16 reference anything other than if they have been
17 admitted as an expert in this case or in South
18 Carolina, but I would think that what you're going to
19 end up doing is saying "in this case" and confine it,
20 both sides, to that.

21 MS. BROWN: Your Honor, good morning. I'm Alli
22 Brown for J&J. And I would just clarify to the extent,
23 though, that they open the door by suggesting that you
24 have been qualified by courts around the country, then
25 we would be entitled --

1 THE COURT: Sure. They go at their peril if they
2 try to do that, but my bet is they will be careful.

3 MS. BROWN: Thank you, Judge.

4 THE COURT: Seven, any mention that other
5 defendants not present were sued by plaintiff.

6 MR. SWETT: That's agreed to, your Honor.

7 THE COURT: Very good.

8 Number 8, felonies and convictions not involving
9 dishonesty or moral turpitude.

10 MR. SWETT: That's agreed to, your Honor.

11 THE COURT: Ten, past alcohol or drug use.

12 MR. SWETT: That's agreed to, your Honor.

13 THE COURT: 11, other nonlife-threatening medical
14 conditions.

15 MR. SWETT: This one is opposed. If I may be
16 heard on this one, your Honor.

17 THE COURT: Yes, sir.

18 MR. SWETT: So, in this case, there are two
19 medical conditions specifically I know the defendants
20 raise in their briefing. One is the fact that
21 Mrs. Johnson had or has endometriosis. The other is
22 that she had or has chronic inflammation. And we don't
23 believe those are relevant. Now, I'll tell you why.

24 They argue for two reasons that they may be
25 relevant in their briefing. One is as to causation of

1 mesothelioma, and the other is as to damages for
2 reducing life expectancy.

3 Johnson & Johnson has two causation experts, maybe
4 more, in this case. I know Dr. Diette and
5 Dr. Attanoos. They have both admitted in their
6 depositions that there is absolutely no evidence that
7 her endometriosis caused or contributed to her
8 mesothelioma.

9 They both admitted -- and the page cite for
10 Dr. Attanoos is page 72 of his deposition in this case,
11 and Dr. Diette is pages 59 through 60 and 74 through
12 75.

13 They both admitted that there's no evidence that
14 chronic inflammation caused or contributed to her
15 mesothelioma. So we don't think it's relevant for
16 causation.

17 As to the damages issue, neither of their
18 experts -- none of their experts will say that her life
19 expectancy was shortened because of either
20 endometriosis or chronic inflammation. So we don't see
21 any way that these nonlife-threatening medical
22 conditions are relevant in this case. It's just a --
23 you know, if they want to throw it out there, it's just
24 to make the jury speculate about medical issues that
25 aren't at issue.

1 Thank you, your Honor.

2 THE COURT: All right, sir. Say your name for me
3 again.

4 MR. SCHROLL: Yes, your Honor. May I be heard?

5 THE COURT: Say your name.

6 MR. SCHROLL: Matthew, Schroll, S-c-h-r-o-l-l.

7 THE COURT: Very good.

8 MR. SCHROLL: Thank you, Judge.

9 Your Honor, as to the two points raised by counsel
10 as to causation, it's not a matter of whether or not
11 these conditions caused peritoneal mesothelioma, but
12 our causation experts will discuss literature noting
13 that these processes are correlated with the occurrence
14 of peritoneal mesothelioma.

15 And this sort of dovetails with the number 12 --

16 THE COURT: Correlated is not any kind of medical
17 term that I'm familiar with. What do you mean by that?

18 MR. SCHROLL: So, your Honor, our causation
19 experts will testify that the occurrence of peritoneal
20 mesothelioma, particularly among women, occurs without
21 exposure to asbestos. You're familiar with --

22 THE COURT: I'm very familiar with that, and we're
23 going to have a big discussion about Dr. Attanoos. I
24 qualified him as an expert in the Boyd-Bostic case. I
25 have read very carefully what's been said here, and I

1 have looked very carefully at his writings, et cetera,
2 and I've got some concerns about the opinion he
3 expresses, the flat opinion that there's no asbestos in
4 J&J talc and there's no -- that her mesothelioma was
5 not caused by asbestos.

6 And so if you've got something to offer that
7 relates endometriosis and chronic inflammation to her
8 mesothelioma, I want to know about it.

9 What I understand him to say is it's idiopathic or
10 spontaneous, and there are a lot of different ways
11 those terms are used in his evolving testimony about
12 this issue. But I don't pretend to remember every
13 single thing that's been said, but I've read it all
14 pretty recently, and I don't see anything that suggests
15 that endometriosis or chronic inflammation caused her
16 to develop mesothelioma.

17 MR. SCHROLL: Well, your Honor, I would suggest
18 that it's not -- again, it doesn't suggest that those
19 disease processes caused her peritoneal mesothelioma,
20 but the fact that they -- that she has them, that
21 they're there and that there is literature that
22 Dr. Attanoos will say and rely on that shows that,
23 among occurrences of peritoneal mesotheliomas, that
24 these other disease processes are also present, bears
25 on his opinion about wealth of knowledge that shows

1 that peritoneal mesotheliomas among women are unrelated
2 to asbestos exposure.

3 THE COURT: I don't get that connection at all. I
4 don't understand that connection one bit.

5 He does opine that 60 to 70 percent of women who
6 have peritoneal mesothelioma develop it either
7 spontaneously, idiopathically or it's not caused by
8 asbestos. And, frankly, I'm still hunting for what the
9 scientific foundation for those assertions is. But how
10 do you leap from that to saying endometriosis or
11 chronic inflammation bears on that?

12 MR. SCHROLL: Your Honor, I would suggest that the
13 literature that Dr. Attanoos would rely on shows that
14 the presence of those is consistent with the peritoneal
15 mesothelioma being idiopathic or spontaneous.

16 THE COURT: So, no, sir. At most, there's some
17 observation that some of these folks also have
18 inflammation and/or endometriosis, but there's -- not
19 even Attanoos says that either of these diseases have
20 any impact on the diagnosis that he makes that they are
21 not caused by -- that the mesos are not caused by
22 asbestos, one, and, two, that they are spontaneous or
23 idiopathic. He doesn't relate this chronic
24 inflammation or endometriosis to either of those.

25 MR. SCHROLL: I --

1 THE COURT: He observes that some of the people
2 who have mesothelioma also have these other conditions.
3 He doesn't make the link between those two from a
4 medical standpoint other than they both exist. He
5 doesn't have any testimony that says the one causes the
6 other.

7 MR. SCHROLL: Your Honor, your link, I would agree
8 as you state to causation, but I think it's no
9 different than in other asbestos case saying that there
10 was the presence of pleural plaques. It would be
11 indicative --

12 THE COURT: No, sir. Pleural plaques are a direct
13 indication that something has happened relative to the
14 impact of asbestos.

15 Endometriosis and chronic inflammation, I have
16 never seen any literature that suggests that those are
17 indicators of the development of mesothelioma --

18 MR. SCHROLL: Well, your Honor --

19 THE COURT: -- or the impact of asbestos on the
20 body.

21 MR. SCHROLL: Your Honor, I would submit to you
22 again that Dr. Attanoos is not going to say that those
23 disease processes are causal, but he will rely on
24 literature that notes that they occur at the same time
25 in a number of cases.

1 THE COURT: Unless he can relate them in a
2 causative way, that is simply an observation that
3 causes the jury to speculate about something when he
4 can't tie it to the development of the disease at all.

5 MR. SCHROLL: Your Honor, again, I think there's
6 an issue about a difference between stating that those
7 cause it definitively and just noting that they occur
8 in a number of peritoneal mesothelioma cases that are
9 unrelated to asbestos. So I understand --

10 THE COURT: Mr. Schroll, I will say this: I've
11 never heard a medical witness yet say it definitively.
12 They all testify to a reasonable degree of medical
13 certainty. And I'm assuming that that's the way that
14 Dr. Attanoos will testify as well.

15 He's not -- definitively has never been the
16 standard for any kind of medical testimony, but there's
17 got to be some causative connection to a reasonable
18 degree of medical certainty, and I don't see it in this
19 material, all of which I read again last night. I read
20 Attanoos' article again this morning.

21 MR. SCHROLL: I understand, your Honor, and I'll
22 just -- I'll note again that Dr. Attanoos will not come
23 in and say those are causal. He will just note the
24 presence. I'll move on to --

25 THE COURT: Well, then, my response on number 11

1 is I will grant the motion.

2 MR. SCHROLL: Well, your Honor. I'm sorry. I
3 didn't get to address counsel's second argument about
4 our argument about how it relates to plaintiff's health
5 condition, pain and suffering.

6 THE COURT: Life expectancy. You don't have any
7 expert that says life expectancy is impacted by either
8 of these conditions, as I understand it.

9 MR. SCHROLL: Your Honor, my understanding is that
10 there's also a lost wage claim here, and we believe
11 that that bears on the plaintiffs ability to make that
12 lost wage claim about whether or not she can continue
13 to work independent of the diagnosis of peritoneal
14 mesothelioma.

15 THE COURT: I think that's a stretch, and I'm
16 going to grant the motion.

17 MR. SCHROLL: Thank you, your Honor.

18 THE COURT: Number 12, asbestos generally as the
19 cause of plaintiffs mesothelioma. This is: Defendant
20 should be precluded from stating or indicating in the
21 presence of the jury that the plaintiffs mesothelioma
22 is caused by anything other than asbestos exposure.

23 I assume that's contested.

24 MR. SWETT: It is, your Honor. I think that is a
25 catchall that included the previous one, and it also

1 includes the spontaneous. I think if we address the
2 other issues, we don't specifically have to address
3 number 12. It's going to be addressed either way.

4 THE COURT: I agree with you. I'll deny this one
5 as it stands, and we'll move on to the more specific
6 about Dr. Attanoos, et cetera.

7 The second motion in limine is to exclude
8 defamatory comments by defense counsel aimed at
9 prejudicing the jury. I'm sure you all will have
10 agreed upon this.

11 MR. SWETT: Your Honor, in fairness, there was an
12 agreement that they would not say that this is a scam,
13 a fraud perpetrated by plaintiffs' lawyers, and there
14 was one more, but --

15 THE COURT: Lawyer-made sham.

16 MR. SWETT: Right. I would respectfully
17 request -- just a little bit of background. I'm not
18 going to get into all the facts of what happened
19 previous, but we have had, across the country, rulings
20 on this issue, and it doesn't matter. They still get
21 up and do it in closing argument, and at that point
22 it's too late.

23 So I would ask for a ruling such that sanctions
24 are in play, but I do want to address three specific
25 areas that touch on this.

1 And one would be we would ask that they be
2 precluded from stating or insinuating that this is just
3 greedy plaintiffs' lawyers looking for the next big
4 target.

5 I mean, there are ways to insinuate these things
6 that they do, and when they do it throughout the entire
7 trial, they tie it all together in closing arguments,
8 and it's very prejudicial.

9 Another example would be talking about 1-800
10 plaintiffs' lawyers' ads. Well, we don't run ads,
11 Motley Rice, and the plaintiff in this case didn't find
12 us through an ad. She researched herself and
13 determined that there were papers out there that showed
14 asbestos in baby powder, and that's how she decided to
15 sue Johnson & Johnson in this case. That's what the
16 record says. So we would ask they not be allowed to
17 interject anything about plaintiff lawyer advertising.

18 Another question that they like to ask is
19 nobody -- and it ties in with one of the other motions
20 in limine that we're going to get that's related. They
21 ask questions without foundation to come back and make
22 these same arguments.

23 One example is: Well, no one other than
24 plaintiff's lawyers ever told you that Johnson's baby
25 powder caused your mesothelioma.

1 Well, in this case, there's no foundation for that
2 question. She was asked in her deposition. Her
3 doctor -- she never asked her doctor what caused her
4 mesothelioma. Her doctor never told her what he
5 thought, her treating doctor. And that's because, as
6 she said, his objective is to treat. He could care
7 less about causation. She's dying. She's scheduled
8 the middle of next week to go back and have another
9 surgery, just sit in the hospital two more weeks just
10 so she can live a couple more months. They're not
11 worried about what caused her disease; they're trying
12 to treat her.

13 And that's the equivalent of asking the age-old
14 question: When did you stop beating your spouse?
15 There's no foundation. It is a --

16 THE COURT: Well, Mr. Swett, let me just shorten
17 this and tell you-all this, and I've tried several of
18 these cases and many, many other asbestos cases, and I
19 think all of you-all well understand how we operate in
20 South Carolina. We don't do it the way it apparently
21 is done in some other states.

22 We don't allow any reference to the attorneys
23 involved, to the defendants. We don't allow y'all to
24 call them killers. We don't allow them to attack
25 y'all. We don't allow them to delve into how the

1 plaintiff selected her lawyer. We don't allow any
2 talking about looking for a big target or the next big
3 payday or anything of that nature.

4 And I know these lawyers well, particularly
5 Mr. Herns, and I don't think they will violate that.
6 But I will indicate very firmly on both sides that,
7 first of all, there will be no references of that kind
8 by either party being pejorative to the other party, to
9 their lawyers, to their organizations.

10 We're going to try this on the basis of evidence,
11 and the status of the two lawyers, two sides and their
12 lawyers, is not evidence of anything. So that won't be
13 done. Just as the Golden Rule will not play a part in
14 this, just as the reptile arguments and things of that
15 nature, that's just not how I allow cases to be tried.
16 And I'm not alone in this. That's how we try cases in
17 South Carolina. We try them on the basis of the
18 evidence presented.

19 I know you were very disquieted at the way your
20 case was pursued in New Jersey, I believe it was. That
21 won't happen here. I don't know who those lawyers were
22 for J&J there, but Mr. Herns is the lead lawyer in this
23 case here. I have every confidence that this case will
24 be tried as it should be. And I have every confidence
25 in you, Mr. Swett, that you will try it that way too.

1 MR. SWETT: Thank you, your Honor. If I may just
2 raise one point that's related to that.

3 There is an issue that was opposed in the
4 response, so I wanted to just address this one specific
5 issue and see if we can get agreement or ruling one way
6 or the other.

7 It was argued in closing argument tied into this
8 whole lawyer-made thing that plaintiffs didn't even
9 send this case to their expert until after they had
10 already filed the lawsuit.

11 THE COURT: We're not going to allow that to
12 happen. That's not evidence of anything, those kinds
13 of things. You're quite right about that. We can't,
14 as we sit, think of all of them. And I know you were
15 in a bind about that when it finally was argued that
16 way because then you have to decide, am I going to
17 object in front of the jury when it's a jury argument
18 or I'm not.

19 But I think the lawyers well understand that I
20 just don't permit such things, and I will deal with
21 motions for sanctions if I have to, if those things
22 occur, but I just don't believe they will.

23 So be comforted by that, Mr. Swett, and if you see
24 anything along those lines, and I say this to the
25 defense counsel as well, you immediately stop the

1 proceedings, approach the bench, and we'll deal with
2 them.

3 MR. SWETT: Thank you, your Honor.

4 THE COURT: All right, sir.

5 So with respect to excluding defamatory comments,
6 that was number 2. That's granted.

7 With regard to number 3, plaintiffs motion in
8 limine regarding other asbestos exposure, that
9 defendant be prohibited from referencing other
10 potential exposures to asbestos unless they make an
11 offer of proof as to substantial exposure, I don't
12 routinely grant this. It rarely comes up. But do you
13 have something?

14 MS. BROWN: I just want to revisit the prior
15 ruling just for a point of clarification, as I
16 understand your Honor is, perhaps, granting that
17 motion.

18 Mr. Swett and I had a conversation earlier this
19 week. We were, of course, disappointed by the motion,
20 and I assured him we intend to operate appropriately in
21 the courtroom and consistent with your Honor's ruling.

22 But one point of clarification I would seek, your
23 Honor. We don't intend to argue that the only person
24 to tell Ms. Johnson that she has mesothelioma from baby
25 powder were the lawyers, but I do think it's fair

1 testimony that the jury should hear that the medical
2 records do not attribute her mesothelioma to baby
3 powder and that her doctors have not told her that her
4 mesothelioma was caused by baby powder.

5 And so I just want to clarify with your Honor so
6 as to not run afoul of the ruling --

7 THE COURT: What is that evidence of? What is
8 that evidence of? I mean, their argument is this:
9 That everyone has their own role to play in treating a
10 sick person.

11 Frankly, in commercial asbestos cases, I have
12 almost never seen a medical record where the doctor
13 says anything other than this is mesothelioma. The
14 doctors do not get into saying, and occurred because he
15 worked around gaskets at Bowater. They just don't do
16 it that way.

17 So it's really not evidence one way or another
18 because the doctors don't -- that's just not their
19 role. Their role is to diagnose the pathology or
20 disease as they see it. And if they can tell what
21 caused the disease, i.e., doctors many times do say
22 asbestos caused mesothelioma, and they back that up
23 with whatever they observed on their tissue samples and
24 their slides and their other physical examination of
25 the patient. Even postmortem slides sometimes is the

1 only way you can really tell.

2 MS. BROWN: Understood.

3 THE COURT: But for the doctor -- whether the
4 doctor has told a patient, hey, this is asbestos from
5 your job, or this is asbestos because of baby powder, I
6 don't think that's pertinent to anything.

7 MS. BROWN: Your Honor, we would confine our
8 questioning and argument, then, to simply just the
9 objective facts of the medical records, you know, who
10 she treated with, what the chest slides showed, what
11 the pathology showed.

12 THE COURT: And it will show mesothelioma.

13 MS. BROWN: Understood, your Honor.

14 THE COURT: I am not -- I have read some of the
15 voluminous material, but I'm not saying that I am
16 completely familiar with all of her medical records,
17 and I don't know whether any of them have any kind of
18 material that indicates asbestos as the cause of the
19 mesothelioma she suffers from.

20 Normally, that's hard to do if they're living. So
21 I don't know about that. But whatever they say, they
22 say, but --

23 MS. BROWN: Understood.

24 THE COURT: -- I would not allow you to say, hey,
25 they never told her baby powder caused it.

1 MS. BROWN: Understood, your Honor. We will argue
2 then just the objective, what the medical records show
3 in terms of her chest films and things like that.

4 THE COURT: Sure. And I think that's fine.

5 MS. BROWN: Thank you, Judge.

6 MR. SWETT: I assume you're talking about
7 biomarkers, is sort of where we're going with this.

8 MS. BROWN: Sure.

9 MR. SWETT: That's fine.

10 THE COURT: Okay. Do we understand each other?

11 MS. BROWN: We do, your Honor. Thank you.

12 THE COURT: Very well.

13 Then we're on -- then, of course, number 3
14 regarding other exposure is granted.

15 Now we come to number 4. This is the motion in
16 limine to exclude testimony of defendant's --

17 MR. SCHROLL: I'm sorry, your Honor. I think that
18 colloquy related to the previous motion. I don't think
19 we were heard on number 3.

20 THE COURT: All right. Well, number 3.

21 MR. SCHROLL: It was opposed, your Honor.

22 THE COURT: All right. What is it -- go ahead,
23 Mr. Swett.

24 MR. SWETT: Thank you, your Honor.

25 THE COURT: I'm trying to move this thing along.

1 I'm obviously not succeeding.

2 MR. SWETT: Your Honor, it's not disputed in this
3 case that she's had no other asbestos exposure. She
4 testified to it. Their experts say she had no other
5 asbestos exposure. Our experts say she had no other
6 asbestos exposure.

7 There's one reference -- the only thing I can
8 possibly think that this comes up. I'm sure I will be
9 corrected. There's one medical record where she said
10 that at one point in time she may have lived in a house
11 that had asbestos siding on it.

12 Now, that should be excluded based under all of
13 your previous rulings because, as you know, the law is
14 and the science is static asbestos does not increase
15 one's risk. There's no evidence that it was
16 manipulated, she was around it. There's no evidence of
17 proximity, frequency. I mean, it should be excluded.
18 I'll leave it at that unless there's new issues raised.

19 THE COURT: Mr. Schroll, is this asbestos
20 siding -- you want to be able to say something about
21 it?

22 MR. SCHROLL: That's one issue, your Honor.

23 THE COURT: I would deny on that. I'm not going
24 to let you talk about unmanipulated building material.
25 Now, if there was some other thing about Sheetrock was

1 hung at one point with a joint compound --

2 MR. SCHROLL: Your Honor, may we have the
3 opportunity to ask her if it was manipulated in her
4 presence?

5 THE COURT: Well, I don't know if you're going to
6 have a chance to ask her or not because I don't know
7 whether she's going to be able to take the stand.

8 MR. SCHROLL: If she's not, then we're not able
9 to, your Honor, but I think it's a statement that was
10 in her medical record, that she reports living in a
11 house that had asbestos siding at one point, and I
12 think we're entitled to ask her anything about that,
13 about whether or not it was manipulated in her
14 presence.

15 THE COURT: Well, maybe you will have a reversible
16 error in the record, but I'm not going to allow you to
17 ask her about asbestos siding or joint compound because
18 I see nothing in the record that indicates that she was
19 exposed to any respirable asbestos from those two
20 things.

21 If you can show that as we get into trial, then I
22 might reverse myself. But at the present moment in
23 time, I'm inclined to grant this motion.

24 MR. SCHROLL: The other item, your Honor, that we
25 noted in our opposition was the testimony of plaintiffs

1 mother where she recalled having a conversation with
2 the plaintiff at the time she was living in Boise,
3 Idaho, and Ms. Johnson expressed to her mother that she
4 was concerned about potential asbestos exposure at that
5 time.

6 And this came up in Ms. Janet Jones' deposition,
7 her mother, and she testified that that conversation
8 happened in realtime. We also think that that's
9 something that we should be able to ask the plaintiff
10 if she recalls that instance and why she believed that
11 at that time.

12 THE COURT: Mr. Swett.

13 MR. SWETT: With respect to that, your Honor, the
14 testimony that they're referring to, one, the plaintiff
15 was deposed in this case, and they asked her straight
16 up: Is there anywhere you possibly think you could
17 have been exposed to asbestos other than potentially in
18 baby powder? She said no.

19 Plaintiffs mother is, like, 80 years old. She's
20 had a stroke. She's got dementia. At the very end of
21 her deposition, she recalled this hearsay that --
22 basically, she recalled her daughter telling her when
23 they were in Utah that some of the people were getting
24 sick out there and she -- according to the mother, it
25 may have related to asbestos. But there was no

1 specifics about anything.

2 I mean, the full testimony is in the response.
3 One, it's speculative, it's hearsay, and it doesn't
4 satisfy any of the requirements in terms of actual,
5 identifiable exposure.

6 THE COURT: I will not allow it.

7 And your objection is, of course, preserved for
8 the record.

9 MR. SCHROLL: Thank you, your Honor.

10 THE COURT: All right. Number 4, motion in limine
11 to exclude testimony of defendant witnesses' personal
12 use of Johnson & Johnson baby powder.

13 Yes. I must say that I had heartburn when
14 Dr. Hopkins testified the last time in Boyd-Bostic
15 about he uses J&J baby powder, his grandchildren use
16 J&J baby powder; some prefer cornstarch, he prefers
17 talc, and all that kind of business. That's not
18 evidence of anything, so I would grant that motion.

19 MR. SCHROLL: Your Honor, may I be heard?

20 THE COURT: Yes, sir.

21 MR. SCHROLL: Your Honor, I think it's -- the
22 point that plaintiffs were making in their motion is
23 that they were arguing that it's not necessarily
24 evidence of causation, but I'll note for the record,
25 your Honor, that plaintiffs are seeking punitive

1 damages in this case. They're going to put in evidence
2 in an attempt to prove the defendant's willful, wanton
3 or reckless conduct.

4 Count 4 of their complaint is for fraud and
5 misrepresentation, which I believe is still a count
6 that they're pursuing in this case.

7 In the paragraphs in that count, they're alleging
8 that defendants failed to disclose and intentionally
9 misrepresented facts to the plaintiff, that they -- the
10 defendants knew that the misrepresentations were false
11 and acted with reckless disregard towards the
12 plaintiff.

13 And, your Honor, it's relevant as a -- does this
14 testimony make more or less -- a fact more or less
15 probable. The allegation --

16 THE COURT: Why in the world does Dr. Hopkins'
17 personal use of Johnson's baby powder or the fact that
18 his grandchildren use it make more or less probable the
19 willful, wanton, and reckless conduct, if any, of
20 Johnson & Johnson?

21 MR. SCHROLL: Your Honor, it makes it less
22 probable because Dr. Hopkins was responsible for
23 product safety and toxicology during much of the same
24 time period that plaintiff alleges she was using baby
25 powder.

1 And it's testimony that the jury can hear and that
2 they can draw an inference that it's less probable that
3 the person in charge of product safety and toxicology
4 would be using a product that he knew to be hazardous,
5 that he knew to have asbestos in it, and that he would
6 endanger his own children and himself through that
7 product.

8 THE COURT: I don't see it, and I would grant the
9 motion to forbid any reference to his personal use or
10 the use of his grandchildren. I don't think that's
11 evidence that is at all pertinent. And I think to the
12 extent that it is, its prejudicial value way outweighs
13 any probative value it might have. It's, in my view,
14 an attempt to appeal to the emotions of the jury.

15 There are plenty of very good ways -- Dr. Hopkins
16 is a respected scientist and a respected member of
17 Johnson & Johnson's leadership and performs very
18 credibly when he testifies. I don't think he needs
19 this kind of emotional tug and pull to make his point
20 about his bona fides, so I will not allow that kind of
21 testimony.

22 MR. SCHROLL: Thank you, your Honor.

23 THE COURT: All right. Number 5, plaintiff's
24 motion in limine to exclude questions based on facts
25 not in evidence lacking foundation with the attempt to

1 attack plaintiffs counsel. Y'all have agreed upon
2 that.

3 MR. SWETT: We have addressed that, your Honor.

4 THE COURT: Very good. That's granted.

5 Number 6 is plaintiffs motion in limine to exclude
6 questions about political blogs of any expert witness.
7 Agreed?

8 MR. SWETT: Yes, your Honor.

9 MR. SCHROLL: Your Honor, I think in our response
10 we agreed to the extent that plaintiffs don't open the
11 door by discussing alleged targeted advertising of
12 African-Americans.

13 THE COURT: You know, that came up before. I have
14 not seen it offered in any case that we have had.

15 What do you say to that, Mr. Swett?

16 MR. SWETT: This is a specific exhibit that they
17 are trying to backdoor out of the case. And your Honor
18 has ruled on this exhibit, and we might as well address
19 it because I assume they're going to --

20 THE COURT: All right. Let's see it.

21 MR. SWETT: I'm sure you guys are familiar with
22 this one.

23 For the record, your Honor, that's P535. It's
24 from the time period 1992. I'll direct the Court's
25 attention to the back page. As of 1992, number 5, item

1 number 5.

2 THE COURT: Talc is an adult-focused business and
3 baby-focused line. Longer term investigating, moving
4 brand to a different franchise, short-term supplement
5 in the plan with periodic adult promotional support,
6 period, five adult FSI.

7 MR. SWETT: Is it the one on negative -- it might
8 be six.

9 May I? It's on the second page, if I may.

10 THE COURT: I see number 2.

11 MR. BRANHAM: Right, but I want to address the one
12 on the back first, your Honor, because you have already
13 ruled on this. It's -- may I see the exhibit?

14 THE COURT: Yep.

15 MR. SWETT: It's number 2, sorry.

16 So in 1992, Johnson & Johnson was aware of
17 negative publicity. They knew doctors were concerned
18 about inhalation of talc. Specifically, it mentions
19 cancer. So they were concerned. They knew. That's
20 notice.

21 Now, in the same year -- flip over on the first
22 page. I don't care to argue they were targeting a
23 certain ethnic group. The point of this document is
24 knowing in 1992 -- this is during the time period that
25 Mrs. Johnson's still using baby powder. They are

1 increasing their marketing efforts to any group of
2 people knowing that there is a cancer link between
3 their talc and -- knowing there is a link between their
4 talc and cancer, they are increasing marketing. They
5 are looking for new growth opportunities despite --

6 THE COURT: This is one of Johnson & Johnson's
7 documents dated 8/5/92: Major opportunities. Number
8 2, investigate ethnic, paren, African-American,
9 Hispanic, closed parens, opportunities to grow
10 franchise.

11 Johnson's baby powder has high usage rate among
12 African-Americans, 52 percent, and among Hispanics,
13 37.6 percent, additional usage. Indices are high for
14 African-American and Hispanic females for Johnson's
15 baby powder talc, 139 and 101, respectively. Hispanic
16 females also have a high index against Johnson's baby
17 powder cornstarch.

18 The brand can increase volume in 1993 by targeting
19 these groups. The brand will institute an adult
20 Hispanic media program and potentially launch adult
21 black print efforts.

22 All right.

23 MR. SWETT: So the way you allowed this document
24 to come in in the first trial, I just asked Dr. Hopkins
25 about it. I pointed to the second page. I said:

1 Dr. Hopkins, y'all were aware in 1992 that doctors were
2 worried about the cancer link to talc.

3 And I flipped over to the first: And,
4 Dr. Hopkins, you agree with me that even in 1992,
5 knowing that, Johnson & Johnson still looked for major
6 growth opportunities to continue selling and up their
7 sale of this talc that's causing cancer.

8 I mean, it's very relevant to the issue of
9 knowledge and basically what did they do once they had
10 that knowledge.

11 THE COURT: Let's stop here and say this number 6
12 had nothing to do with that. That had to do with
13 Dr. Richard Kradin, who is a potential expert for
14 plaintiff, who published a political blog at a certain
15 point in time after the most recent presidential
16 election. And I would certainly grant a motion to
17 prohibit any questions about political blogs by any
18 expert witnesses. So that, no question about it.

19 This is a different thing. This is an evidentiary
20 piece of material. I don't know if this is the
21 appropriate time to discuss it, but what do you have to
22 say, Mr. Schroll?

23 MR. SCHROLL: I think it's appropriate. It's
24 specifically identified in a later motion in limine, so
25 I think now is appropriate.

1 THE COURT: Sure.

2 MR. SCHROLL: I would say that based on counsel's
3 representations that it's not evidence that he intends
4 to use, should he then use the document, in the very
5 least, that number 2 paragraph should be redacted so
6 that the inflammatory part of that document is not
7 shown to the jury.

8 THE COURT: What's inflammatory about it? I mean,
9 y'all -- what he's saying is he wants to use it to
10 point out that at a point in time when there was
11 negative publicity in the health community and negative
12 doctor endorsement because of cancer linkage, Johnson's
13 opportunity profile was to investigate targeting
14 African-American and Hispanic cohorts to grow the
15 franchise. I mean, that's basically the import of this
16 document in part.

17 How is -- everything is prejudicial if it's not in
18 your favor. What is inflammatory about this in a way
19 that is unrelated to the proof that they seek to make
20 and the big proof and -- as you know, the heart and
21 soul of this battle of these J&J cases is when did they
22 know and what did they know and what did they do about
23 what they knew.

24 MR. SCHROLL: I think what counsel first cited was
25 on the second page, number 2. That does not mention

1 any race or ethnicity issues. And then --

2 THE COURT: Well, it says -- it does not. It does
3 not. It says that major obstacles include number 2,
4 the negative publicity from the health community on
5 talc inhalation, dust, negative doctor endorsement,
6 cancer linkage continues.

7 And so they're using that to show that J&J in 1993
8 knew that there was concern being expressed in the
9 medical community about the linkage between Johnson's
10 products, and specifically baby powder, and cancer.
11 And at the same time in that very same planning
12 document for major opportunities, the advertising
13 profile would include targeting a specific -- two
14 ethnic groups who like baby powder and use it a lot.
15 What's -- I mean --

16 MR. SCHROLL: Your Honor, when I was --

17 THE COURT: It's not a pretty picture, but what
18 is -- what makes it inadmissible?

19 MR. SCHROLL: Well, your Honor, I would say that
20 when you talk about prejudice, is it overly prejudice
21 that it outweighs its probative value? I would submit
22 to you that counsel can make his point that there was,
23 on the second page, the number 2 paragraph, and then on
24 the first page, it can be investigate opportunities to
25 grow the franchise, that point can be made without

1 mentioning ethnic, African-American or Hispanic.
2 That's just inflammatory, and it sort of injects race
3 and ethnicity into an issue to a point that I believe
4 counsel is not trying to make.

5 THE COURT: Well, the argument would be that
6 Johnson & Johnson injected that issue into it because
7 of the advertising campaign they planned, and this is
8 evidence of it from their records.

9 MR. SCHROLL: But, your Honor, and I would just
10 submit that it's very inflammatory and overly
11 prejudicial and it's not relevant.

12 The fact that it's certain ethnic groups that are
13 targeted is not relevant to counsel's point that
14 they're arguing that it was to investigate
15 opportunities to grow the franchise.

16 THE COURT: Let me just say this: At the moment
17 I'm inclined to admit it, as I did before, but I will
18 allow you to revisit this issue if you can give me some
19 better information, and it can be in the form of legal
20 research from other courts as to this very issue and
21 whether anyone has made the determination that the
22 prejudicial nature of this material outweighs its
23 probative value.

24 I won't close the door to you on that argument. I
25 understand the argument. It was the same argument that

1 was made before. I allowed it. But I will revisit it.
2 I will permit you to submit additional material if you
3 would like.

4 MR. SCHROLL: Thank you, your Honor.

5 THE COURT: All right. Item seven, motion in
6 limine to preclude defense experts, including
7 Dr. Attanoos, from offering any nonexpert opinions or
8 opinions for which they are not qualified, unreliable
9 opinions lacking foundation at trial.

10 This is a point of concern to me, and so I turn --
11 I'll be honest with you. I have had concerns about
12 both of the experts, the big experts in this case,
13 Attanoos for J&J and Longo for y'all.

14 Longo's situation has been clarified rather
15 considerably because he now uses, as I understand it,
16 72 samples that are all from the historic files of J&J.
17 The biggest thing I have been concerned about with
18 Longo was the chain of custody with these cans of baby
19 powder that pass through various hands of various
20 plaintiffs' lawyers and then came down, and I have
21 agonized a lot about that before.

22 Apparently, that's been cured. Now, they have
23 still got all kind of contentions that we'll hear
24 about, about the reliability of below-the-waist testing
25 and other things that relate to Longo's testimony.

1 But I'm at Attanoos right now. And, specifically,
2 Mr. Swett, if I could target your argument a little bit
3 here.

4 MR. SWETT: Yes, your Honor.

5 THE COURT: You have focused, as I understand it,
6 on two big opinions of Dr. Attanoos. One is that her
7 mesothelioma was not the result of exposure to
8 Johnson's baby powder, but rather it occurred
9 spontaneously or idiopathically.

10 MR. SWETT: Yes, your Honor.

11 THE COURT: And you contend that he is not a
12 reliable expert who meets the tests of the rules and
13 therefore not qualified to offer this opinion.

14 MR. SWETT: Yes, your Honor.

15 THE COURT: Am I focused on what you're concerned
16 about?

17 MR. SWETT: I can address that first, your Honor,
18 yes.

19 THE COURT: All right, sir.

20 MR. SWETT: So Dr. Attanoos intends to give the
21 opinion that Johnson's baby powder could not have
22 caused Mrs. Johnson's mesothelioma. This opinion lacks
23 foundation and is unreliable.

24 Sort of back up a bit prior to 2018, before he
25 started testifying for Johnson & Johnson. Even now he

1 will admit -- I won't even back up. Even now he will
2 admit that amphibole asbestos exposure above background
3 causes mesothelioma. Not just pleural mesothelioma,
4 peritoneal mesothelioma, which is what is at issue
5 here. He admits that.

6 Now, he knows -- he admits that Mrs. Johnson used
7 baby powder for 20-plus years, but he specifically
8 chose in this case not to follow his own methodology
9 for looking at whether or not an exposure is causative
10 of mesothelioma.

11 I mean, he's testified that his methodology --
12 whenever you have a potential exposure and you want to
13 determine whether or not that caused or contributed to
14 mesothelioma -- is you look to see whether or not there
15 was any asbestos in the material, determine the fiber
16 type, know what level the product releases asbestos,
17 and basically whether or not that person was exposed
18 above background.

19 He doesn't follow that methodology here. And I'll
20 get to it later, the lack of foundation he relies on or
21 attempts to rely on. But here he didn't even look
22 whether or not Johnson's baby powder had asbestos in
23 it. I mean, there's been testing in this record.
24 Johnson & Johnson's own expert, Dr. Sanchez, has tested
25 Johnson's baby powder. He didn't rely on that.

1 Notably, Dr. Sanchez now has found asbestos in
2 Johnson's baby powder. But they didn't give him those
3 results.

4 He didn't rely on Dr. Longo's testing of Johnson's
5 baby powder. He has seen no testing of baby powder or
6 the ore, the Vermont talc that it came from. None of
7 them.

8 So he didn't follow number 1. And because he
9 didn't look to see whether or not there was asbestos in
10 the baby powder, he doesn't know what type of fibers
11 are involved, he doesn't know at what levels asbestos
12 fibers are released, and he certainly can't know
13 whether she was exposed to above background levels of
14 asbestos or not.

15 He didn't look at any of the fiber release studies
16 that are in evidence; Dr. Longo's fiber release study.
17 He didn't even look at any of the peer-reviewed
18 literature. He admitted he hasn't even looked at the
19 peer-reviewed literature that addressed whether or not
20 there was asbestos in baby powder in general. He said
21 something like he tried to read Blount's article, but
22 he didn't.

23 I mean, he hasn't looked at any of the pertinent
24 evidence in this case. Instead, while choosing to
25 ignore the actual evidence in this case, he instead

1 claims to base his opinion on evidence that can't form
2 the basis of this opinion.

3 He relies on, one, epidemiological studies of talc
4 miners in Italy where it's documented that those talc
5 mines, non-Johnson & Johnson talc mines, are free of
6 asbestos. He focuses on toxicological studies of rats
7 exposed to Italian cosmetic grade talc with no
8 asbestos. And he focuses on mortality studies of
9 non-Johnson & Johnson Vermont talc mines.

10 He does that so -- if we just back up, he looks at
11 everything non-J&J, everything arguably -- yeah, there
12 are talc miners in Italy, but they're not exposed to
13 asbestos-containing talc. And he ignores everything
14 that's pertinent in this case. He doesn't look at any
15 of the testing of the products at issue in this case.
16 He doesn't look at any of the testing at the mines, the
17 specific Johnson & Johnson mines at issue in this case.

18 It's like an ostrich who sticks his head in the
19 sand. He doesn't want to know because he wants to be
20 able to give his opinion. And it will come out -- if
21 he is allowed to testify, it will come out -- this is
22 important, I think. Since he's testified for Johnson &
23 Johnson, I think he's been retained in 25 cases,
24 non-J&J cases included, he has said every single one of
25 those mesotheliomas, men included, are all spontaneous.

1 There's 25 or 30 cases he's been retained in since
2 2018, men, women, young people, old people, people with
3 pleural plaques, biomarkers of asbestos exposure.
4 Since Johnson & Johnson has retained him, he said
5 every -- there was one he said was commercial
6 asbestos-related. Every other one he said spontaneous.
7 He has no factual foundation for his opinions.

8 So if we're dealing specifically with his
9 spontaneous mesothelioma opinion, it's sort of a moving
10 target. But I think the most important thing to focus
11 on here, one, he didn't follow his own methodology. I
12 don't know how he can even give this opinion about
13 whether or not her use of baby powder affected her
14 meso.

15 But then the second part is he wants to call it
16 spontaneous. And I think the only key part we need to
17 look at with that is before 2018, Dr. Attanoos
18 consistently opined that 60 to 75 percent of female
19 mesothelioma patients had a known history of asbestos
20 exposure. Now that he's been retained by Johnson &
21 Johnson, spontaneous mesotheliomas comprise 60 to
22 90 percent of female mesothelioma cases.

23 And if we look at the evidence in this case, what
24 he purports to rely on, I asked him specifically. I
25 said: Okay -- in his deposition, I said: Okay,

1 Dr. Attanoos, you don't think she had any asbestos
2 exposure. And I'm looking at all your various
3 opinions, and you say idiopathic. You say spontaneous.

4 He defines spontaneous as a naturally occurring
5 mesothelioma caused by age and genetics. All right?
6 And idiopathic is a mesothelioma without a known cause.

7 So I said: Dr. Attanoos, when you're faced with a
8 case like this, how do you determine whether or not
9 you're going to call this an idiopathic mesothelioma,
10 no known cause, versus one that you're going to tell a
11 jury is spontaneous, i.e., caused by genetics and age?
12 Because that's important. How do you reach that
13 difference? How do you reach that conclusion?

14 And he said, page 84 to -- no, 86 to 87 of his
15 deposition. I said: Wouldn't you need genetic testing
16 to determine whether or not it's a spontaneous
17 mesothelioma?

18 His answer: You would need genetic testing to see
19 if there was any constitutional basis to say whether
20 the individual had a cancer previous position.

21 And he goes on, and then he says: And ultimately
22 before you would say that this is a naturally occurring
23 mesothelioma.

24 Well, you know, he hasn't seen any formal genetic
25 testing in this case. Absolutely none. So he has no

1 foundation to come in here and say this is a
2 spontaneous mesothelioma versus an idiopathic
3 mesothelioma, and we believe he should be precluded,
4 one, from even offering an opinion whether her use of
5 baby powder did or didn't cause her mesothelioma. He's
6 got no basis for that. It's unreliable.

7 The peer-reviewed studies they claim he relies on,
8 they're all unrelated to Johnson's baby powder.
9 They're Italian non-asbestos mines. They're rat
10 studies with non-asbestos Italian talc. He doesn't
11 have a proper basis.

12 What he's attempting to do is it's sort of like a
13 general automobile expert who has knowledge about
14 general automobiles but has no knowledge about specific
15 speedometers or instrument panels. He wants to rely on
16 these Italian studies generally, but he doesn't want to
17 get down to the specifics of what's at issue in this
18 case. He's not qualified. So that's the basis of the
19 argument on that issue.

20 We'll address the USGS, which is another big
21 issue.

22 That chart, I'm sure you're familiar with the
23 chart where he wants to talk about the asbestos
24 consumption and how it relates to the meso rates and so
25 they can't correlate. That's another big issue.

1 But I can stop now on the first issue.

2 THE COURT: Let's stop now on the first issue.

3 Well, no. I mean, the whole thing is a -- you are
4 wanting to preclude him from the basic opinion, A, baby
5 powder did not cause her mesothelioma; B, her
6 mesothelioma is naturally occurring because of age and
7 genetics or idiopathic. You want him to be precluded
8 from both of those things.

9 MR. SWETT: Yes, your Honor. And then there would
10 be a C.

11 THE COURT: And the C --

12 MR. SWETT: C is the USGS. So over the years, the
13 USGS puts together -- it's published. And it's
14 Production of Talc. So he puts this chart up -- and I
15 think he did it in our prior cases. He puts this chart
16 up that shows the talc, the ebb and flow of production
17 of talc. You know, it sort of goes up and down.

18 He overlays it with the rate of mesothelioma
19 amongst women. And he comes in and he says, well,
20 because the production of talc went up and down and the
21 rate of meso in women stayed -- he says it stayed
22 stagnant or constant -- he says, therefore, cosmetic
23 talc powders in Johnson's baby powder have no relation
24 to mesotheliomas in females.

25 Well, that has no foundation because I got

1 Dr. Attanoos to admit in his deposition, one, he didn't
2 know that the USGS data was compiled on a voluntary
3 basis. Industry voluntarily submits that. There's no
4 hard-and-fast certainty with that data.

5 He's not aware whether or not Johnson & Johnson
6 ever provided any data for any given year to the USGS.

7 He's not aware whether or not any data on the
8 production of cosmetic talc in any given year came from
9 Vermont mines.

10 As the USGS data shows a rise in production of
11 cosmetic talc, Dr. Attanoos doesn't know how much, if
12 any, of that relates to Johnson's baby powder. He
13 can't say one way or the other.

14 So for one year when production or use of talc
15 went up amongst the general public, he doesn't know if
16 the use of Johnson's baby powder went up or down.

17 Perhaps a bigger issue, a bigger problem, is he
18 acknowledges that cosmetic talc wasn't just used in
19 powders. It was used in chewing gum. You have seen
20 the slides. They argue that a hundred products are
21 made of talc: chewing gum, pills. He doesn't know how
22 much of that data for any given year is actually in the
23 powder form versus chewing gum.

24 And this is important because he admits that talc
25 or asbestos-containing talc has to be in the aerosol

1 form, has to be respirable to cause meso. So for any
2 given year he's relying on this data, he doesn't know
3 how much of that talc that's being produced is actually
4 used in respirable aerosol products.

5 I mean, that's crucial. It's just really
6 disingenuous. When we really dug into the basis of
7 this opinion that he's coming in attempting to tell
8 juries, it lacks foundation. It's very disingenuous.
9 It's unreliable.

10 You know, for any given year, zero percent of that
11 cosmetic talc production could be from Johnson's baby
12 powder. Zero percent could be from aerosol products.
13 100 percent could be just from one manufacturer that
14 produced talc to make chewing gum.

15 THE COURT: I think I understand the argument,
16 Mr. Swett.

17 MR. SWETT: I apologize, your Honor.

18 Additionally, I think it's cumulative if he's even
19 allowed to testify. They have got two experts coming
20 in to say the exact same thing. That's an additional
21 basis.

22 And, finally, we don't think he should be able to
23 talk about any other causes causing her mesothelioma.
24 You know, radiation is a recognized cause. I went
25 through all of them, all the known causes that could

1 cause meso. I went to his deposition, and I said: You
2 can't say to a reasonable degree of medical certainty
3 that this caused it, this caused it, this caused it?

4 He said -- in this case, and he said: No, there's
5 no evidence that any of those other causes caused her
6 mesothelioma.

7 So we don't think he should be able to interject
8 any other causes of mesothelioma other than asbestos in
9 this case because there's no evidence of any other risk
10 factors in this case.

11 Thank you, your Honor.

12 THE COURT: All right.

13 MS. BROWN: May I be heard, your Honor?

14 THE COURT: Yes, of course.

15 MS. BROWN: Thank you.

16 Your Honor, as I understand, there are three
17 issues that plaintiffs are seeking to exclude
18 Dr. Attanoos on, and so I'll take them in turn, and, of
19 course, if your Honor has any questions, I'll answer
20 those as well.

21 But the first is that plaintiffs seek to exclude
22 Dr. Attanoos from testifying that baby powder did not
23 cause Ms. Johnson's mesothelioma. And, of course,
24 plaintiffs own experts agree that when you are trying
25 to answer a question about what caused a disease in a

1 person, the best place to look is the epidemiology.

2 And so they're going to bring Dr. Kradin, their
3 specific causation expert, and he will testify, like
4 all of the plaintiffs case specific experts do, that
5 you look to the studies, the epidemiology studies, the
6 studies in people who were exposed to this product to
7 see if it's causing disease.

8 And, in fact, Dr. Kradin will agree that the very
9 best place to look, the very best epidemiology, is that
10 of the miners and the millers of cosmetic talc, the
11 people who were exposed to the highest levels of
12 cosmetic talc.

13 And so that is exactly what Dr. Attanoos has done
14 here. His opinion that Ms. Johnson's mesothelioma was
15 not caused by baby powder is informed in part by his
16 review and study of the cosmetic talc epidemiology, and
17 that includes studies of the miners and millers in the
18 Johnson & Johnson's Vermont talc mines as well as
19 Johnson & Johnson's Italian talc mines.

20 And I was surprised to hear counsel suggest that
21 the Italian talc mines have no asbestos, which seems
22 contrary to the plaintiffs case here because, of
23 course, those are the very mines that Johnson & Johnson
24 used to source its baby powder for decades. And, in
25 fact, that is the very mine from which the powder that

1 went into some of the Dr. Longo's samples came. And
2 counsel appears to be admitting that that mine, based
3 on the epidemiology, doesn't have asbestos.

4 But there's complete agreement from the experts on
5 both sides that to answer that very sort of threshold
6 question, was her disease caused by this product, we
7 should look at the epi. And that is what Dr. Attanoos
8 has done here to answer that sort of top line question.

9 Now, as counsel points out, his opinion is also
10 informed by, for example, the animal data. And so
11 counsel refers to an animal study that involved
12 injecting Johnson & Johnson's cosmetic talc, Italian
13 talc grade 50, into animals along with chrysotile.
14 And, of course, the animals that received chrysotile
15 got mesothelioma, and the ones that got cosmetic talc,
16 nothing happened. And so that also informs part of
17 Dr. Attanoos' opinion that cosmetic talcum powder could
18 not have caused Ms. Johnson's mesothelioma.

19 And so it is that threshold level your Honor is
20 very familiar with, the South Carolina standard for
21 reliability here. It is consistent in the case law
22 that a reliable and appropriate methodology to employ
23 with a question about whether a product causes disease
24 is to review the published peer-reviewed epidemiology,
25 which, to answer that very first question, is what

1 Dr. Attanoos did.

2 On the second question, your Honor, I understand
3 there's an effort to exclude Dr. Attanoos from saying
4 that Ms. Johnson's mesothelioma was unrelated to
5 asbestos exposure. And I understand that -- to be
6 quite frank, your Honor, the experts and the
7 peer-reviewed literature is not consistent in terms of
8 how they use the term idiopathic, spontaneous,
9 naturally occurring, not related. And I would suggest
10 that there's not a lot of meaning in the differences
11 between those terms.

12 At bottom, Dr. Attanoos' opinion is that her
13 peritoneal mesothelioma, one of the rarest forms of
14 mesothelioma, particularly in women, was not caused by
15 asbestos exposure. And he bases that opinion on a
16 number of factors.

17 It is -- and he bases that opinion on his review
18 of her pathology in this case, of the fact that there
19 was no evidence of any asbestos exposure in the actual
20 pathology that he reviewed.

21 He bases that opinion on his review of the
22 published literature that has, in the most recent five
23 to ten years, looked into women specifically, has taken
24 the statistics of mesothelioma generally and broken
25 them down by gender and looked at whether women's

1 mesothelioma, and particularly peritoneal mesothelioma,
2 could be attributed to asbestos exposure. And we cite
3 in our opposition on page 15 to 16 at least 10 to 15
4 studies, peer-reviewed studies, on which Dr. Attanoos
5 relies for the proposition that peritoneal mesothelioma
6 in women is most often unrelated to asbestos exposure.

7 And I understand counsel and the court's
8 hesitation about the term spontaneous. And perhaps we
9 can sort of assist this process and move it along here.
10 We would agree that Dr. Attanoos will not use the term
11 spontaneous.

12 I read some of your Honor's rulings in some of the
13 prior trials, and I understand the Court has a concern
14 about the idea that this sort of just happened. The
15 gist of his opinion, though, is that it's unrelated to
16 asbestos exposure. And so if the Court has some
17 hesitation about him suggesting it sort of popped out
18 of nowhere by using the term spontaneous, he will
19 confine his opinion to what the published literature
20 says about peritoneal mesothelioma in women not being
21 related to asbestos exposure.

22 And here, in Ms. Johnson's case, in a woman who
23 has absolutely no markers of asbestos exposure, and
24 Dr. Attanoos has reviewed all of the medical records,
25 all of the pathology, all of the available documented

1 evidence, he's coupled that with his review of the
2 peer-reviewed literature to opine that here this rare
3 peritoneal mesothelioma was not caused by asbestos.

4 And then -- sorry. Did your Honor have a
5 question?

6 THE COURT: No. I'll wait until you complete,
7 then I'll ask questions.

8 MS. BROWN: Additionally, there was some
9 suggestion that he -- I think I understand counsel to
10 be concerned that he's not relying on their paid
11 litigation expert, Dr. Longo. And, in fact, I would
12 suggest that what this expert does and what experts
13 should do is rely on the peer-reviewed literature, on
14 the science that takes place outside of the courtroom.

15 And that's, in fact, what Dr. Attanoos has done
16 here. In forming his opinion that cosmetic talc
17 doesn't have asbestos, he relies not only on the
18 epidemiology, but he relies on studies like that that
19 was run by NIOSH and Harvard, by the government, in the
20 '70s of Johnson & Johnson's Vermont talc mines, studies
21 where they went in over a three-year period and
22 collected air samples from the mine and made a
23 determination that Johnson & Johnson's talc in Vermont
24 did not have asbestos. That is a published,
25 peer-reviewed article funded by the government on which

1 he relies.

2 And so I would suggest to the Court that the fact
3 that he does not rely on their paid expert in
4 litigation is certainly not a reason to exclude him.
5 If anything, it is evidence of a more reliable method
6 that he's taken to approach this question of whether
7 there is asbestos in cosmetic talc.

8 Finally, your Honor, there is some discussion
9 about the USGS data. And I would suggest to the Court
10 that all of the issues that Mr. Swett has raised are
11 fodder for cross-examination. Here comes Dr. Attanoos
12 with a graph that shows talc consumption in the United
13 States and a graph that shows peritoneal mesothelioma
14 rates, and he says: Look, they don't correlate. You
15 don't see as cosmetic talc use went up, 30 years later
16 peritoneal mesothelioma went up.

17 And if counsel wants to cross him on, yeah, well,
18 you don't know how much of that was baby powder, well,
19 that's fair for cross-examination, but that's not a
20 reason to exclude the argument, Judge.

21 This is based on published USGS data to which
22 Johnson & Johnson contributes. This is an argument
23 that is in the peer-reviewed literature. The idea that
24 there's no correlation between USGS data and peritoneal
25 mesothelioma rates has been published in part by

1 plaintiffs experts, Dr. Finkelstein, and then a
2 response by Dr. Diette. And so there is a body of
3 scientists in the published literature who have
4 analyzed cosmetic talc consumption and mesothelioma
5 rates.

6 And so I would suggest, your Honor, that there is
7 more than a reliable opinion to the extent that
8 Mr. Swett wants to cross on where the data came from or
9 what it's made up of, that's appropriate for cross.
10 But as a gatekeeper, your Honor, Dr. Attanoos more than
11 meets the reliability test under South Carolina.

12 THE COURT: Okay. Now, how are you doing, Court
13 Reporter?

14 THE COURT REPORTER: I'm fine.

15 THE COURT: All right. Let me ask you a couple
16 questions, Ms. Brown.

17 MS. BROWN: Sure.

18 THE COURT: Dr. Attanoos' opinion that
19 Mrs. Johnson's mesothelioma is unrelated to asbestos is
20 very much informed by his contention that Johnson's
21 baby powder does not contain asbestos, it seems to me,
22 that she used -- she had a heavy use of Johnson &
23 Johnson's baby powder for an extended period of time,
24 but he excludes baby powder as a source for any
25 asbestos exposure on the front end because he doesn't

1 believe that baby powder has any asbestos in it, right?

2 MS. BROWN: Your Honor is correct.

3 THE COURT: Okay. All right. And it seems to me,
4 he kind of backs into this thing that it must be
5 spontaneous or idiopathic. He doesn't have any kind of
6 direct information as to -- if it's spontaneous, and
7 that means it's genetic, he agrees that he's conducted
8 no genetic test and doesn't know if any genetic test
9 has been conducted on Ms. Johnson, so that can't
10 possibly be genetic or age-related infirmities, cannot
11 be to a reasonable degree of medical certainty an
12 underpinning for the opinion that her cancer is
13 spontaneous, that is, related to genetic or age
14 manifestations. He doesn't have anything on that, does
15 he?

16 MS. BROWN: If I could jump in on that, your
17 Honor, as you know, he reviewed in great detail all the
18 pathology that's available here. And as you know,
19 Ms. Johnson was diagnosed at a fairly young age for
20 mesothelioma. She has a history of cancer in her
21 family. And what he found in terms of his review of
22 the pathology also supports his opinion here.

23 What he found was not one, not two, not three,
24 four different neoplasms. So in addition to the tumor,
25 the peritoneal mesothelioma, he found cancer of the

1 appendix, another rare tumor that even their experts
2 agree has nothing to do with asbestos exposure. He
3 found a fibroid, benign tumor of the ovary, and then he
4 found another lymphoma neoplasm as well.

5 THE COURT: Right, but he -- in the face of all
6 that, he does not contend that those things caused her
7 mesothelioma.

8 MS. BROWN: Oh, correct, your Honor.

9 THE COURT: He doesn't contend that either her
10 genetic history or her age or even those specific
11 physical conditions caused her mesothelioma. He simply
12 says it's spontaneous.

13 MS. BROWN: Well, your Honor, I would suggest
14 there's a little nuance there.

15 So the evidence of these other cancers that even
16 Dr. Kradin, their own expert, when deposed said, of
17 course, I'm not even contending they have anything to
18 do with asbestos exposure, is indicative of a genetic
19 process perhaps going on that would --

20 THE COURT: Well, there are a lot of genetic
21 processes that go on in every human being, but we're
22 talking about him relating, as a scientist, a genetic
23 process to the development of mesothelioma. And there
24 is nothing in his testimony that indicates he can do
25 that, correct?

1 MS. BROWN: Well, your Honor, I would disagree
2 just a little bit with the Court. The bottom of his
3 opinion is it wasn't asbestos. And I understand the
4 Court and counsel's concern with the term spontaneous,
5 and he's not going to use that. But it's evidence -- I
6 mean, there's sort of a whole bucket of evidence that
7 it wasn't asbestos.

8 THE COURT: Well, I mean, we don't have res ipsa
9 loquitur in this state or anything close to it, and you
10 can't simply say, well, she had all these other
11 conditions and I say it's not asbestos because I say,
12 as a foundational matter, this baby powder does not
13 contain asbestos and I don't contend she had asbestos
14 exposure from someplace else. So, therefore, I back
15 into the idea that it has to have been either
16 spontaneous or hint, hint, hint, she really has got a
17 lot of cancer in her family.

18 MS. BROWN: Well, your Honor, a couple things. He
19 looked at the pathology. There is no objective marker
20 in the pathology that she was exposed to asbestos at
21 all.

22 THE COURT: Well, he looked at the pathology, but
23 the pathology revealed nothing to him about asbestos
24 and this mesothelioma. It didn't reveal anything one
25 way or another to him.

1 MS. BROWN: Well, there was an absence of
2 any marker. Your Honor is correct. There was an
3 absence of any marker to suggest that it was asbestos
4 exposure. I understand your Honor's concern that he's
5 trying to backdoor an opinion, but that opinion is
6 essentially separate, and that opinion is based on the
7 idea that cosmetic talc does not contain mesothelioma.

8 THE COURT: Okay. Now, let's go into that,
9 because that's really the foundation of it.

10 MS. BROWN: I agree, your Honor, right.

11 THE COURT: Here is the place that I'm very
12 concerned. There is a world of J&J testing, and we
13 have sure had the battles about that and the boxfuls
14 given to the jury and big boxfuls that say, hey, we
15 have tested it all these millions of times and we never
16 found any asbestos. He has not been provided with any
17 of Johnson & Johnson's testing, as I understand it.

18 MS. BROWN: The same with their expert.
19 Dr. Kradin hasn't looked at it either.

20 THE COURT: I'm not talking about him now.
21 Because Dr. Attanoos is going to make affirmative
22 conclusions that baby powder -- Johnson & Johnson's
23 baby powder never contains any asbestos.

24 MS. BROWN: Not true, your Honor. In fact, the
25 concern -- I understand the Court's concern. He is not

1 going to speak to what's in baby powder. He's not here
2 to say 100 percent asbestos-free. That is not his
3 opinion. As your Honor correctly points out, he hasn't
4 reviewed all the testing. That's not his piece of the
5 puzzle. He doesn't know how to interpret microscopy
6 tests anyway. What he is going to opine on is based on
7 the epidemiology. Whatever is --

8 THE COURT: Well, he's not an epidemiologist.
9 He's a pathologist.

10 MS. BROWN: Correct, your Honor. But as part of
11 his general practice, as a practicing physician who
12 sits on the U.S./Canadian international mesothelioma
13 panel, part of what he does as a pathologist --

14 THE COURT: Well, what specific epidemiology is he
15 going to rely on? I have read his articles. I have
16 read all of that. I don't see what he's relying on.
17 He's got the generalities about women, and they evolved
18 over time, but at the moment, it's 70 percent of women
19 who have mesotheliomas, they're spontaneous,
20 idiopathic, but they're not related to asbestos.

21 MS. BROWN: Sure.

22 THE COURT: And there's no specific test that he
23 can point to that has even tested for the presence of
24 asbestos, but he's going to exclude asbestos as a
25 possibility for their mesothelioma based on his kind of

1 general view of what epidemiology as a science shows.

2 What he's really doing is this: He's saying --
3 he's into that old debate over the good asbestos and
4 the bad asbestos. Oh, there's some asbestos that's not
5 really asbestiform. It's asbestos, but it's
6 non-asbestiform asbestos and, therefore, it doesn't
7 ever cause any problems. It's only the asbestiform.
8 Some go even further and say, oh, it's only crocidolite
9 that causes the problem, not even chrysotile.

10 He's not a geologist or anything close to that.
11 But that's the real foundation of his opinion that this
12 baby powder, which he will admit when you drill down to
13 it, does contain amphiboles, some of it does. It's
14 been tested. It's been shown to have it. J&J's own
15 testing has shown that. But he's going to say it's not
16 the bad kind of stuff that causes mesothelioma.

17 MS. BROWN: And perhaps it would give the Court
18 comfort, we're not going to solicit that opinion from
19 him at all. He is not going to talk about what is in a
20 bottle --

21 THE COURT: Well, then, if he's not going to talk
22 about that, what is going to be the foundation of his
23 opinion that Johnson & Johnson's baby powder, which we
24 now will all agree, has some asbestos in it?

25 MS. BROWN: We would disagree with that, your

1 Honor, that's there's asbestos --

2 THE COURT: Well, there's going to be proof that
3 there's some asbestos in it, whether it's the good
4 asbestos or the bad asbestos or a trace of it or a lot
5 of it or whatnot, that all is a big debate. But he's
6 going to categorically say that it cannot possibly have
7 ever caused mesothelioma, that baby powder can.

8 MS. BROWN: And, your Honor, he will base that not
9 on a review of what I would agree he has not done in
10 this case, which is review the testing that Dr. Longo
11 did, the testing that Dr. Sanchez did. That's not what
12 he's qualified to do. That's not what he did.

13 THE COURT: So what is he going to base it on?

14 MS. BROWN: So he's going to base that on his
15 review of the large epidemiology studies of the miners
16 and millers of cosmetic talc.

17 THE COURT: The miners and millers of cosmetic
18 talc have nothing to do with cosmetic consumption of
19 baby powder. These people don't -- are not respirating
20 highly refined and packaged baby powder. What they are
21 respirating is something that occurs when they are in
22 the mines.

23 MS. BROWN: Understood.

24 THE COURT: There is a whole contention about what
25 happens when you respire highly refined, very small

1 particle cosmetic baby powder. The millers and miners,
2 none of them have ever respiration any of that or were
3 they tested for that.

4 MS. BROWN: Well, the reason, though, Judge, it's
5 important when you think about how -- the plaintiffs
6 claims here. Their claim is that the asbestos is
7 contaminating the mine.

8 THE COURT: They are -- no, they are contending --
9 couple of things. They're contending that there is
10 asbestos in the talc mines from which this material was
11 produced and that the refinement that takes place to
12 produce the product, which is baby powder, makes
13 whatever is in that baby powder highly respirable.

14 MS. BROWN: Understood, your Honor. And even
15 though their expert will agree, though, that the people
16 with the most exposure to what gets into baby powder
17 are the miners and the millers.

18 THE COURT: No, I think there is a real scientific
19 debate about that. Some say that there's the highest
20 exposure when it's mined. That depends on, when you
21 drill down to it, how much asbestos there is in the
22 particular mines that you're talking about.

23 MS. BROWN: Understood, Judge.

24 THE COURT: But these cases, for the consumption
25 of cosmetic talc products, depends on a much more

1 specific analysis of how this product is used and was
2 respirated than mining.

3 MS. BROWN: Sure. And on that, a couple things
4 there. One, at least the expert in this case would
5 agree. I understand other experts may take a different
6 position, but at least Dr. Kradin would say miners and
7 millers have the highest amount of exposure.

8 But to your Honor's concern that when it gets into
9 the product maybe it's in a different form,
10 Dr. Attanoos would also rely on the extensive
11 evaluation that the FDA has done on the finished
12 product. So there, as your Honor well knows --

13 THE COURT: Well, that kind of depends on which
14 year you're talking about. We know that, you know,
15 OSHA as well as the FDA's look at asbestos-containing
16 products, and particularly the FDA's look at baby
17 powder products, has evolved tremendously over the
18 years. So, you know, you would have to -- I would have
19 know from Dr. Attanoos exactly what year he's talking
20 about.

21 But what concerns me, he has a blanket opinion
22 that excludes this baby powder as -- well, first of
23 all, he says her mesothelioma is not caused by
24 asbestos.

25 MS. BROWN: Correct, Judge.

1 THE COURT: That's the first thing. And that is
2 highly informed by his contention that it could never
3 have come from baby powder.

4 MS. BROWN: And informed in part, Judge, by the
5 FDA testing, just to answer your question, is square in
6 the heart of the plaintiffs usage in this case.

7 So as your Honor heard in the previous trials,
8 there is a scare, it's in the newspaper, and the FDA
9 gets on top of this and does this 1970s testing, which
10 is really in the heart of the alleged usage here. And
11 so that would also inform Dr. Attanoos' opinion that
12 what was tested by the FDA in the '70s, what was
13 addressed again in the 1980s, as your Honor well knows
14 in the form of the citizens' petition about whether
15 baby powder needs a warning. I mean, they do a
16 worst-case scenario test, as your Honor well knows, and
17 say -- let's assume worst-case scenario, thousands of
18 times more than what the plaintiff even allege here,
19 would somebody be exposed to more than background, and
20 they say no, no warning required and then continue on,
21 as your Honor knows, and test as recently as 2009 and
22 2010. So that also would inform his opinions here in
23 this case as well as the work of the FDA.

24 THE COURT: Well, I am much troubled by this.

25 I will hear one more time from you, Mr. Swett,

1 briefly, please, sir, and let's go on and see what we
2 can do about closing this matter one way or another.

3 MS. BROWN: Thank you, your Honor.

4 MR. SWETT: Very briefly, your Honor.

5 I know Dr. Kradin's not at issue here, but I do
6 want to draw a distinction because he does rely on epi
7 studies. He relies on epi studies showing that
8 asbestos exposure relates to mesothelioma and increases
9 the risk.

10 Dr. Attanoos here -- there are no cosmetic talc
11 epidemiologic studies. There are none. Dr. Attanoos
12 relies on studies not dealing with this product,
13 whereas Kradin deals with studies dealing with
14 asbestos. That's what we're talking about. You know,
15 we asked him, based on a hypothetical question, you
16 know, assuming what our experts found, you know, would
17 this amount of asbestos have caused meso? Yes.

18 Dr. Attanoos doesn't do that. He starts off out
19 the gate, well, baby powder didn't have asbestos. But
20 he didn't even look at any of the testing. He didn't
21 look at any peer-reviewed literature dealing with this
22 product. He didn't even look at Blount. Blount's
23 peer-reviewed. That deals with Johnson's baby powder.
24 That showed asbestos in Johnson's baby powder. He
25 didn't look at that.

1 He looked at peer-reviewed literature dealing with
2 Italian non-asbestos-containing talc. And despite what
3 Mrs. Brown said, the rats weren't injected with
4 Johnson's baby powder from Italy. It wasn't the same
5 grade. It was not Johnson's Italian baby powder. And
6 it was not -- any of the studies that he relies on,
7 they're Italian, non-J&J mines, they're
8 non-asbestos-containing talc. It's not the product at
9 issue here. You can't draw the correlation.

10 Finally, as your Honor pointed out, there's
11 nothing to draw the other leap that he makes. The
12 first leap that he makes is from -- you know, he says
13 it's an unfounded assertion that baby powder didn't
14 have asbestos.

15 The second leap that he makes that he's got no
16 support for is to somehow say, well, her mesothelioma
17 was not only caused by asbestos, it was caused by age
18 and genetics, because he admittedly says you would need
19 testing to confirm that, you would need testing to give
20 that opinion, and he admitted he's done no testing
21 here. So I don't know how he can say her meso was
22 caused by age and genetics with no foundation at all.
23 It's unreliable.

24 Basically, what we have here is Dr. Attanoos wants
25 to say anything but asbestos caused this lady's meso,

1 but really I didn't even look to see if she was exposed
2 to asbestos. That's basically what we have.

3 THE COURT: I understand.

4 All right. You know, what I've done in the past
5 is to come down on the side of saying it's a battle of
6 the experts, and, you know, that's what it's going to
7 be. But I am deeply concerned about this testimony of
8 Dr. Attanoos.

9 MS. BROWN: And, your Honor, if it alleviates some
10 of the Court's concern, as counsel again raised this
11 idea he's going to opine on what's in asbestos, we will
12 not solicit an opinion from him that baby powder does
13 not have asbestos. That is not his area of expertise,
14 and he's not going to come in and talk about it.

15 MR. SWETT: But that forms the whole basis of
16 where he starts with that premise.

17 THE COURT: But he is going to say that her
18 mesothelioma was not caused by Johnson & Johnson baby
19 powder. He's going to say that?

20 MS. BROWN: Yes, your Honor, based on the
21 epidemiology of women who get peritoneal mesothelioma
22 who have no --

23 THE COURT: Again, I've read those articles, not
24 only his, but the citations he gives for the statements
25 he makes, and I've got to say it's the most attenuated

1 stuff in the world. His opinion is by far the most
2 affirmative suggestion excluding baby powder as a
3 source than any of the sources in his studies that he
4 talks about that talk about gender and the impact that
5 gender has on peritoneal mesothelioma, and that's what
6 gives me great concern.

7 And when he's asked about it, and I noticed this a
8 couple times in his deposition, he'll say, well, they
9 didn't say exactly that, but that's the inference from
10 what they say.

11 Nobody says it definitively like he does that --
12 first of all, that 70 percent of peritoneal
13 mesotheliomas are caused by something other than
14 asbestos. Nobody says it that way. He puts together a
15 group of observations to come up with that statement,
16 and I have found no one else who says -- and I can sure
17 stand to be corrected, but I have found no one else who
18 says, about a specific situation like this one, this
19 mesothelioma could not have been caused by asbestos and
20 could not have been caused by baby powder.

21 That's what's got me worried is taking him all the
22 way to the end to the definitive, acceptable degree of
23 medical certainty, expressing those opinions, when the
24 literature he uses is a much more general discussion of
25 statistics that doesn't take the final dive he takes

1 and express the opinion he expresses.

2 MS. BROWN: And I would just suggest to the Court
3 to the extent your Honor is inclined to consider this
4 further, is to look at footnote 12 on page 15 and 16 of
5 our brief, which cites the studies that I think may
6 give the Court comfort that it's just not Dr. Attanoos
7 who's saying, well, this had nothing to do with
8 asbestos, but this is here published literature in
9 addition to his own peer-reviewed work that has studied
10 women who get this very rare peritoneal mesothelioma,
11 have asked them, interviewed them about asbestos
12 exposure, looked at lung fibers and concluded that
13 their mesothelioma was unrelated to asbestos.

14 And so the extent your Honor wants to look at
15 the -- you know, what he's relying on, I would point
16 the Court to that footnote.

17 THE COURT: I understand.

18 MS. BROWN: Thank you, Judge.

19 THE COURT: Well, all right. I will tell you
20 this. My current inclination is to limit very
21 extremely what Dr. Attanoos can say. I will try to
22 make a final determination about that and e-mail all of
23 you about it as quickly as I can. But I am very, very
24 reluctant to allow him free rein to express the opinion
25 he expressed in the report from his office he made on

1 Beth-Anee Johnson where he flat-out says that her
2 mesothelioma cannot be caused by asbestos and that
3 Johnson & Johnson baby powder does not contain
4 asbestos.

5 Those two things are worrisome to me in terms of
6 whether he has got the expertise and uses a scientific
7 method that is recognized, is using peer-reviewed
8 material that expresses that opinion, all those kinds
9 of normal indicia that experts must use.

10 I'm not saying -- I'm not slamming the door to him
11 right now, but I am deeply concerned about that --

12 MS. BROWN: Understood, your Honor.

13 THE COURT: -- and I will try to clarify my
14 thinking in the next couple of days.

15 MS. BROWN: We appreciate that.

16 THE COURT: The thing you just handed me, which,
17 obviously, I haven't had a chance to completely study,
18 but I appreciate you bringing it to me, I will study
19 that in detail before I make any determination about
20 this, and I will try to give you something on that
21 quickly.

22 MS. BROWN: We appreciate that, Judge. And to the
23 extent it helps take some work off your plate, I know
24 one of the things you said you're concerned about is
25 he's going to get up there and say baby powder doesn't

1 have asbestos, and we won't elicit that testimony.

2 THE COURT: I understand, and I appreciate that,
3 and that helps me considerably in how I evaluate what
4 I'm going to do here.

5 MS. BROWN: And I would also say no, he doesn't
6 have to say the word spontaneous. His opinion --

7 THE COURT: I understand.

8 MS. BROWN: -- is not based on asbestos.

9 THE COURT: Yes, ma'am. And that may be the way
10 to solve this problem because I don't want to simply
11 deprive -- this is a clash of the experts without
12 regard to what happens here. And y'all have experts
13 who have very different opinions about this, and I
14 don't want to prevent from you from being able to put
15 your case on in that regard, but I don't want to
16 violate the injunction of *Watson vs. Ford Motor Company*
17 and other cases from South Carolina that make it clear
18 that the judge has the responsibility to look on the
19 front end to see whether this expert is within a field
20 of expertise with the kind of scientific foundation,
21 peer-reviewed methodology that makes these a legitimate
22 expression of expert opinion. That's what's got me
23 concerned.

24 MS. BROWN: Understood, your Honor. Thank you.

25 THE COURT: Okay. Let's see what else we've got

1 here. That was seven. And I think that's the end of
2 the -- seven was the end of the plaintiffs motions in
3 limine.

4 MR. SWETT: Yes, your Honor.

5 THE COURT: All right. Now, have we got --
6 Johnson & Johnson, have we got separate motions in
7 limine?

8 MR. HERNS: Yes, ma'am, your Honor.

9 THE COURT: All right. Tell me where to look,
10 Louis.

11 MR. HERNS: It's in the large notebook, Johnson &
12 Johnson motions in limine.

13 THE COURT: I see replies to plaintiffs motions in
14 limine. J&J motions in limine, Longo, omnibus and
15 punitive damages. Is that the one you're looking at?

16 MR. HERNS: Yes, ma'am.

17 THE COURT: Okay. Now, what time are we?

18 Court reporter, we're going to take a little
19 break.

20 Let's -- I always keep mine so fast, but what is
21 it, about 11:05? Why don't we be back here at 11:20 or
22 thereabouts, so we all may be refreshed, and we'll go
23 again.

24 (WHEREUPON, a recess was taken from 11:03 a.m. to
25 11:22 a.m.)

1 THE COURT: Before I leave this issue of
2 Dr. Attanoos, I am looking at the document that bears
3 the date April 6th, 2019, Richard L. Attanoos, Boverton
4 Park House, Boverton Park Drive Vale of Glamorgan in
5 Wales. And this is an opinion letter to Lucy Wilson,
6 Willcox & Savage, Norfolk, Virginia, Re Beth-Anee
7 Johnson.

8 And I am looking at a summary and opinion, and I
9 am going to list for you the paragraphs in the opinion
10 that give me the most concern so that you may know what
11 I'm thinking about as we depart here today.

12 Page 16, the paragraph -- the second paragraph on
13 the page: The epidemiological evidence correlating
14 time trends, incidents by gender, and commercial
15 asbestos use indicate that a significant portion of
16 pleura in almost all of the peritoneal mesothelioma in
17 women in the United States appear unrelated to
18 asbestos, citing Price, McGawfcar (phonetic) -- whom I
19 certainly remember very well from the Bostic trial --
20 and Attanoos.

21 I do not find that opinion to be -- at the moment
22 to be sufficiently reliable for Dr. Attanoos to express
23 that opinion.

24 This contrasts -- the next paragraph: This
25 contrasts with pleural mesothelioma arising in men as

1 epidemiological and mineralogic studies show commercial
2 amphibole asbestos causes the majority of diffuse
3 malignant pleural mesotheliomas in males. This is
4 usually from occupational sources of exposure.

5 As those two opinions are juxtaposed with each
6 other, I do not find them reliable.

7 With respect to -- page 17, paragraph 4 on the
8 page: With respect to chrysotile asbestos, Ms. Johnson
9 details a history of potential exposure to various
10 building products which may have contained chrysotile
11 asbestos, including but not limited to drywall, joint
12 compound and siding.

13 I do not find that to be reliable enough to be an
14 opinion he can express, nor do I find it consistent
15 with the evidence as I know it at the moment.

16 Then the paragraph that begins: With respect to
17 malignant mesothelioma and chrysotile asbestos, I will
18 state epidemiological studies have shown that exposure
19 to chrysotile presents a risk of pleural mesothelioma
20 only when chrysotile or is contaminated with tremolite
21 asbestos or other amphibole asbestos and that the risk
22 even under those conditions is very low and is due to
23 the degree of contamination and so forth through the
24 rest of that paragraph, citing McDonald and Liddell.

25 And, finally, on that page in paragraph 3 from the

1 bottom, it says: Epidemiological studies do not show
2 that chrysotile causes malignant peritoneal
3 mesothelioma.

4 I do not find that that is a reliable summary of
5 the epidemiological studies that I know of from the
6 material submitted to me in this case.

7 And then on page 20, the third paragraph on the
8 page: Given the latent period for mesothelioma and so
9 forth.

10 The next paragraph: Accordingly, this evidence
11 indicates that Johnson & Johnson cosmetic talcum
12 powder, a product sourced from Italy and Vermont, did
13 not contain asbestos.

14 The next paragraph: On the basis of the
15 epidemiology, mineralogical evidence, clinical studies
16 and animal toxicological studies, any exposure to
17 Johnson & Johnson talcum powders, including Johnson &
18 Johnson baby powder that Ms. Johnson may have had,
19 would not pose a risk for her peritoneal mesothelioma.

20 I find that those paragraphs are not supported by
21 any reasonable expert confidence on Dr. Attanoos' part,
22 nor the kinds of scientific evidence, peer-reviewed
23 studies and whatnot that would support his ability to
24 opine in that way.

25 And then, finally, the paragraph: Accordingly,

1 even if Johnson & Johnson talcum powder brands contain
2 cosmetic talc from mining sources which in themselves
3 contained trace elements of asbestiform, mineral, or
4 non-asbestiform, amphibole fragments, the overall
5 effect on human disease and specifically in
6 mesothelioma induction is inconsequential and
7 de minimis because consistently no mesotheliomas are
8 observed in the epidemiological or clinical studies of
9 heavily exposed subjects or even high-dose
10 toxicological animal studies.

11 And continuing on the next page, 21, the next
12 paragraph: For consumers exposed to Johnson & Johnson
13 talcum powder, such as baby powder via infrequent
14 exposures, the cumulative dose would be orders of
15 magnitude below the levels experienced in the talc
16 miners and millers.

17 I do not find that that paragraph has any basis in
18 the scientific material that has been cited in
19 Dr. Attanoos' report.

20 The next paragraph: Any exposure to Johnson &
21 Johnson talcum powder brands and baby powder that
22 Ms. Johnson may have had would not pose a risk for her
23 peritoneal mesothelioma.

24 I do not find that he is able to express that
25 opinion to a reasonable degree of scientific or medical

1 certainty.

2 And the paragraph on page 21, the last paragraph
3 starts: The scientific literature also indicates that
4 a significant and often substantial portion of the
5 mesotheliomas have no identical asbestos exposure for
6 malignant mesotheliomas not clearly attributable to
7 some proven external agent. The term spontaneous or
8 naturally occurring mesothelioma has been used. This
9 comprises some 60 to 90 percent of female mesothelioma
10 cases and the fraction of spontaneous or naturally
11 occurring mesotheliomas are the highest in North
12 American women with extrathoracic mesothelioma, citing
13 himself 2018.

14 I do not find that there is sufficient scientific
15 support for the expression of that opinion by
16 Dr. Attanoos in court.

17 And finally: In summary, I consider, based on the
18 information available with a reasonable degree of
19 medical certainty that -- it says "Mr. Johnson," but
20 I'm sure it's a typo. It's Ms. Johnson's malignant
21 peritoneal mesothelioma was of a spontaneous or
22 naturally occurring neoplasm which arose unrelated to
23 any prior asbestos exposure.

24 I do not consider that Dr. Attanoos has the
25 sufficient scientific background or sufficient

1 information from the literature or from the information
2 about Mrs. Johnson's malignant peritoneal mesothelioma
3 to make this -- to testify as to this conclusion to a
4 reasonable degree of medical certainty.

5 Now, that is currently what I'm thinking, but I'm
6 not -- as I've said before, I'm not closing the door
7 completely, but I wanted -- rather than do some kind of
8 e-mailing back and forth, I just felt the simple thing
9 to do was to list out the paragraphs that give me the
10 most concern about the medical report, because the
11 bottom line is that's what we've got to deal with,
12 that's the kind of -- the preview or outline of
13 Dr. Attanoos' testimony.

14 MS. BROWN: And, your Honor, I understand your
15 concerns about the reliability of those opinions.
16 Would it be helpful and could we, with the Court's
17 indulgence, submit a short submission with the
18 underlying scientific data --

19 THE COURT: That's exactly what I'm inviting you
20 to do. That's why I felt, in fairness -- and, of
21 course, it also gives the plaintiff a chance to look
22 over this medical opinion one more time and say
23 whatever they want to say as well.

24 MS. BROWN: Sure thing. Thank you, your Honor.

25 THE COURT: But, obviously, we're on a short

1 string, but the sooner you can deal with that the
2 better so that we can see where we are.

3 MS. BROWN: Yes. Thank you, Judge.

4 THE COURT: Now, we are at J&J's motion in limine,
5 Dr. Longo.

6 MS. BROWN: That's me, Judge.

7 THE COURT: All right, ma'am.

8 MS. BROWN: Back again.

9 I'll be short, your Honor. I know we have been
10 doing a lot of motions this morning, and you have heard
11 from Dr. Longo in the past, and we have made this
12 motion in the past. And so certainly we raise three
13 issues in our motion relating to grounds to exclude
14 Dr. Longo.

15 Your Honor is well familiar with Dr. Longo's
16 methodology, which he admits by using TEM, the type of
17 microscopy, he is unable to distinguish between
18 asbestos and non-asbestiform. And I will submit, your
19 Honor, we will leave that argument on the papers. We
20 will leave our argument on PLM, another type of
21 microscopy that he uses, on the paper as well.

22 But what I do want to raise with the Court is
23 something your Honor hit on this morning and I think
24 you have been concerned with in some of the other
25 trials, and that has to do with some of the province of

1 where these bottles came from that he tests and what he
2 does with the information in some of the testing of
3 bottles that were bought off of eBay or given by a
4 plaintiff's lawyer or, you know, things like that and
5 that come from time periods, your Honor, that have
6 absolutely nothing to do with the alleged usage in this
7 case. And so I would focus our oral argument here on
8 Dr. Longo's sort of extrapolation. And there are sort
9 of two points to that, your Honor.

10 So as I understand your Honor's ruling in some of
11 the previous trials, you were concerned about the fact
12 that some of these bottles were purchased off of eBay,
13 were with plaintiffs' lawyers before Dr. Longo tested
14 them, came from places without a proper chain of
15 custody --

16 THE COURT: I'll stop you right there and say
17 this: I understand now that Dr. Longo has done some
18 revision of his presentation and has used 72 samples
19 that are taken from the historic records or files of
20 J&J.

21 I certainly could solve that thing by saying
22 Dr. Longo can express opinions only based on the
23 material from the J&J records and not from these
24 bottles off of eBay or produced by plaintiffs' lawyers.
25 I always did have a little bit of heartburn about that,

1 and I don't mind making that ruling.

2 I see my friend is standing there wanting to say a
3 little something.

4 MR. FINCH: Yes, your Honor. This relates to one
5 test. Dr. Longo did two types of tests. One, he
6 tested Johnson's baby powder to determine if there is,
7 in fact, asbestos in it.

8 THE COURT: Right.

9 MR. FINCH: He did that from -- initially, he did
10 that from bottles supplied to him from multiple
11 sources. And then more recently he has done that from
12 both bottles of Johnson's baby powder from the
13 historical either repository or from museums and also
14 from Imerys talc mines.

15 There is one -- another test that he does, which
16 is called the below-the-waist fiber release test, which
17 your Honor let us use in the Boyd -- both of the
18 Boyd-Bostic trials. That is based on one of the
19 bottles that he got from a collector at the Kazan firm,
20 which has been the subject of -- what it is, is it has
21 a certain amount of asbestos in it. He uses that to do
22 fiber release testing just as if he had a piece of
23 Kaylo from an unknown providence and he says, what's
24 the fiber release from Kaylo?

25 His opinions about what's the amount of asbestos

1 fiber that come from a container of cosmetic talcum
2 powder which has asbestos in it is based on that
3 particular study and based on the Gordon Millette
4 article involving a different cosmetic talcum powder
5 that shows fiber release. And he has a range of
6 exposures based on that, taking into account the
7 possibility --

8 THE COURT: Right. In the Gordon Millette, I
9 don't have a problem with that. I mean, they don't
10 like -- they fuss about Dr. Millette and his hands
11 on --

12 MS. BROWN: Well, it's not J&J. But that's cross,
13 I understand, Judge.

14 THE COURT: I don't have any heartburn about the
15 Gordon Millette.

16 MS. BROWN: Right.

17 THE COURT: But I do have a little concern about
18 the below-the-waist because it uses those other sources
19 that -- frankly, I guess I'm trying to protect you from
20 yourself a little bit. I would think that appellate
21 review would have a little more concern about the chain
22 of custody with those in this situation. With these
23 others, there can be no question about it.

24 MR. FINCH: I understand that, your Honor. But
25 the fact of the matter is, it's what's in our record.

1 Now, there are some subsequent testing he has
2 done, which is not yet available that we can't use in
3 this trial that would not be a chain of custody issue.
4 But for the purposes of the below-the-waist video, you
5 let us testify to that and also play the video in both
6 Boyd-Bostic trials.

7 THE COURT: I get that. I let Dr. Attanoos go
8 wild in the Boyd-Bostic too, and I've given some
9 thought to all of that.

10 MR. FINCH: So we would just say that this is no
11 different than -- in terms of the extrapolation
12 argument, this is no different than -- and we cited
13 this in our paper -- when Berman and Middleton does
14 tests on asbestos-containing joint compound, they don't
15 know where it came from, and they show what's the fiber
16 level of that.

17 Dr. Longo has some asbestos-containing talcum
18 powder that happened to come from Johnson & Johnson.
19 He said this is what the fiber release is of this kind
20 of thing that has asbestos in it, and the rest is
21 fodder for cross-examination, I would submit, your
22 Honor.

23 THE COURT: Well, here is kind of the way I'm
24 looking at this thing, and correct me if I'm wrong. I
25 don't want to make a ruling on an assumption that's not

1 correct, but the Gordon Millette -- the heart and soul
2 of what you want out of the below-the-waist is how
3 these fibers release, and that leads to how respirable
4 they are and --

5 MR. FINCH: And the range of exposure.

6 THE COURT: And it makes a lot of sense. I mean,
7 opposing counsel doesn't love this very much, but, you
8 know, it's one thing when you are breathing in a rawer
9 form of asbestos in an industrial or commercial setting
10 as it's, you know, being thrown about in the workplace
11 and so forth. But it is another thing -- and this is
12 what I think Longo's point is, when you -- what you're
13 breathing in may be much lower content of asbestos in
14 it than in a commercial setting, for example.

15 MR. FINCH: Yes, your Honor.

16 THE COURT: But it's so much more respirable, at
17 least that's his argument, because of the very, very
18 ground-up nature of it and the silky platform upon
19 which it moves into the system of respiration, which is
20 the talc, it's the played talc itself. That's what I
21 have devined out of what he's trying to say. That you
22 that could you get out of Gordon Millette just as easy
23 as you can get out of below-the-waist. You just don't
24 have that beautiful, little film with the dark -- and
25 that and the Tinsley lighting and all that, I think

1 that's fine. I don't think there's anything wrong with
2 that, and I'd let it in with no problem about that.

3 What I'm trying to do is not go into evidence that
4 relies on the bottles that are not as verifiable as
5 these are that they're J&J.

6 MR. FINCH: Well, here's the issue, your Honor.
7 He has two foundations for his opinion about what is
8 the fiber release from asbestos-contaminated talc
9 powder. One is the peer-reviewed Gordon Millette
10 paper. The other is his own below-the-waist testing.

11 THE COURT: Sure.

12 MR. FINCH: The third is testing that is not at
13 issue in this case because it has not been produced to
14 the defendants yet.

15 So as long as he can give the opinion, I have
16 tested Johnson's baby powder and I believe it contains
17 asbestos because of the historical samples I got from
18 the company, and as long as he is not precluded from
19 giving an opinion, based on my review of information
20 both in the peer-reviewed literature and elsewhere, it
21 is my opinion the range of asbestos exposure associated
22 with using cosmetic talcum powder is .1 fibers per cc
23 to 1 fibers per cc.

24 THE COURT: Right.

25 MR. FINCH: If that is permissible, then I don't

1 need to --

2 THE COURT: I'm cool with all that. What I'm
3 saying we ought not to use in this trial is the actual
4 film, the below-the-waist film.

5 MR. FINCH: If that is what your Honor is getting
6 at -- as long as we don't get sandbagged when I've got
7 Longo on the stand and say, Oh, no, he can't testify to
8 his exposure estimate because below-the-waist video and
9 below-the-waist container is out --

10 THE COURT: Yeah, they're not going to do that.
11 If I say it's out, they're not going to refer to it.

12 MR. FINCH: But I want to make sure that it's in
13 that he can give an exposure estimate --

14 THE COURT: He's going to be able to give the
15 exposure estimate because that's platformed on a lot
16 more than just that film. It is platformed on all of
17 his other studies that he has done.

18 All right. So that's the way I would solve our
19 problem here. Number one, I would say no information
20 about the cans of baby powder that are more problematic
21 in terms of who they came from, where they came from,
22 how old they were and so forth and so on. So you use
23 the J&J supplied material.

24 And two, no showing the below-the-waist film.
25 That's how I would solve your Longo issue.

1 MS. BROWN: And I have a couple of points of
2 clarification. It would be not only just the video,
3 but the underlying study. Meaning, we're not talking
4 about this can from the '40s that came from a
5 plaintiff's lawyer's dad and he did --

6 THE COURT: No. And he's cool with that. He
7 wants to be able to give that range of particles and
8 all that kind of stuff, which comes from a lot more
9 than just those old cans in the '40s. And it certainly
10 comes from a lot more and different material than that
11 film in the blackened room with the Tinsley light. So
12 I think we understand each other.

13 MS. BROWN: Understood, your Honor.

14 And I would just address, they have another
15 expert, an industrial hygienist, who relies on
16 below-the-waist. And similarly, that opinion would be
17 out under your Honor's ruling. He needs to rely on
18 Gordon or the published literature as opposed to what
19 your Honor has now excluded.

20 THE COURT: Well, and I think they can adjust it
21 the way that they need to.

22 MR. SWETT: Well, one point of clarification, your
23 Honor. An expert witness is certainly able to rely on
24 inadmissible evidence.

25 THE COURT: Well, that's true. That's true. All

1 right. Let me revise that.

2 All right. The other expert can rely on stuff
3 that's not in evidence, studies that are not in
4 evidence.

5 MS. BROWN: Well, your Honor, then let me, if I
6 could briefly, sort of raise the prejudice issues with
7 this below-the-waist. The very reason why your Honor,
8 I believe, is excluding it via Longo --

9 THE COURT: The only way it's prejudicial is that
10 it used those old cans, and I'm just trying to be
11 consistent there, but all the rest of the reason why
12 you say it's prejudicial, oh, that Tinsley light is
13 terrible, oh, it shows -- in that darkened room, that's
14 not a fair way. I disagree with that. I think all
15 that's perfectly fine.

16 I think the other expert can refer to studies that
17 show that without describing it in such a way that it
18 gets into Dr. Longo and his below-the-waist studies.
19 They'll figure out a way to do that.

20 MR. SWETT: Here is the issue, your Honor. I
21 think we're in agreement. You're allowing Dr. Longo to
22 testify about his range. He's not going to talk about
23 the underlying study and the below-the-waist.

24 THE COURT: That's right.

25 MR. SWETT: Our other expert, who is an industrial

1 hygienist, is just going to rely on that range to do
2 his calculations.

3 MS. BROWN: But, Judge, if that's going to happen,
4 then I have to cross on below-the-waist. I mean --

5 THE COURT: Well, then you open the door, my dear,
6 it's going to be open.

7 MS. BROWN: I understand. But, I mean, if someone
8 is going to get up and rely on this can from Italy --

9 THE COURT: I give you a little bit, and if it's
10 not enough, you're just going to have to make that
11 determination.

12 MS. BROWN: But just to revisit that, Judge, why
13 the second expert shouldn't be allowed --

14 THE COURT: I think the second expert can say, I
15 rely on the range that Dr. Longo -- I'm going to allow
16 Dr. Longo to testify as to the range. If what he or
17 she, whoever it is, is going to say is, I rely on that
18 range to then give my opinion, I'm going to allow that.
19 If you want to get into below-the-waist, then, you
20 know, that's your choice.

21 MS. BROWN: Understood, your Honor.

22 And then just for the record, then, to finish the
23 arguments that are in our brief --

24 THE COURT: Sure. And they're preserved. To the
25 extent I haven't completely granted what you asked for,

1 your position is preserved.

2 MS. BROWN: Okay. On extrapolation, Dr. Longo, of
3 course, is taking a couple of fibers that he claims to
4 find and without any reliable method or any reliable
5 science assuming that that is indicative of the entire
6 bottle.

7 THE COURT: Exactly. That's why you-all don't
8 like Millette's glove thing. I mean, I get that, but
9 you'll be able to cross-examine fiercely on that.

10 MS. BROWN: Understood, your Honor.

11 And, finally, just a point that I think counsel
12 agree and has via e-mail correspondence, the plaintiffs
13 in this case did not put Dr. Longo up for a deposition.
14 They have not given him any Johnson-specific
15 information, and so I would just ask for guidance from
16 the Court per their agreement that Dr. Longo not be
17 giving any opinion as it relates to Ms. Johnson and her
18 exposure here having not been offered, he didn't do a
19 report in this case, and they wouldn't put him up for a
20 deposition here. And so I just want to clarify with
21 the Court that he's restricted to his testing and not
22 to any opinions about Ms. Johnson.

23 MR. SWETT: I disagree with the characterization.
24 Myself and Mr. Herns had an agreement where they didn't
25 need to depose Dr. Longo, we didn't need to depose

1 Dr. Hopkins, but --

2 THE COURT: I'm not restricting Dr. Longo about
3 talking about Beth-Anee Johnson's case.

4 MR. SWETT: And the agreement was basically -- the
5 range is basically what we're talking about. Dr. Longo
6 is going to testify that using -- an individual using
7 Johnson's baby powder, such and such would have this
8 range of exposure.

9 THE COURT: That's right.

10 MR. SWETT: I mean, that's basically --

11 THE COURT: I'm going to allow him to do that.

12 MS. BROWN: And based on below-the-waist? The
13 range is going to be based on below-the-waist?

14 MR. SWETT: It's going to be based on all of his
15 testing, including the peer-reviewed literature. I
16 thought we just agreed on that, that it can be based on
17 everything he's done.

18 MS. BROWN: I understood your Honor to be
19 excluding below-the-waist from the range.

20 THE COURT: No, no. I'm excluding you showing
21 that test and referring to it in that way, but the
22 ranges are in part a product of that below-the-waist,
23 but they're also in part a product of other -- what you
24 think are kind of off-the-wall sort of studies he's
25 done. But I'm going to let him give the range. I'm

1 just not going to let him dramatize it by --

2 MS. BROWN: With the video.

3 THE COURT: With the video.

4 MS. BROWN: Understood, your Honor.

5 THE COURT: Okay?

6 MS. BROWN: Thank you.

7 THE COURT: And all the other things you wish I
8 would do about Dr. Longo --

9 MS. BROWN: Are in the papers for your review.

10 THE COURT: That big, huge hunk of paper that
11 would exclude him or limit his opinions, I'm not going
12 to do that.

13 MS. BROWN: Understood. Thank you.

14 THE COURT: Now, number 2 is the omnibus.

15 MR. HERNS: Yes, your Honor. Louis Herns on
16 behalf of Johnson & Johnson.

17 THE COURT: Yes, Louis.

18 I'm just trying to get here where I'm -- okay.

19 Any reference to other cosmetic powder litigation,
20 I will grant that.

21 MR. HERNS: Other talc powder litigation. We have
22 agreed to that, your Honor. Plaintiff's counsel will
23 not agree -- will agree not to mention other lawsuits.

24 THE COURT: Absolutely.

25 MR. HERNS: But we can use past lawsuits for

1 impeachment purposes.

2 THE COURT: Certainly. And we're always pretty
3 careful about how we do that so that we don't
4 inadvertently mention the name of a case or something.
5 We just call it a sworn statement or things of that
6 nature. We try not to say testimony given in another
7 case or anything like that. But yes, you will be
8 protected about that.

9 MR. HERNS: Number 2 is prohibit any reference to
10 media reports about litigation.

11 THE COURT: Absolutely. That would be granted.
12 No question about it.

13 MR. HERNS: We agreed about that.

14 We could not agree about number 3, any reference
15 to adverse reactions to talcum powder that are not at
16 issue in this case.

17 THE COURT: What are we talking about, like
18 ovarian cancer? Other types of cancer?

19 MR. HERNS: Yes, ma'am.

20 THE COURT: You know, there's always this debate
21 that they have. It's about notice. You know, Johnson
22 & Johnson says, we didn't know, or this material
23 doesn't cause any kind of badness because there's no
24 asbestos in it and it doesn't cause cancer.

25 I certainly think they're going to have to be

1 mighty careful here. I agree with you, Louis, that the
2 prejudicial effect may outweigh the probative value,
3 depending on how far they go, and I don't want this to
4 be a trial of every claim that's been made against
5 Johnson & Johnson for every kind of cancer.

6 But they do have the right to investigate and
7 illustrate to the jury the issue of notice, when
8 Johnson had notice, the fact that they knew their
9 product was causing certain things.

10 Certainly, it's not evidence that they were sued
11 for that, and you could never put that in front of a
12 jury. I don't know what else they may have that would
13 cause other cancers, like ovarian cancer or something,
14 from Johnson & Johnson products to be in a format where
15 it's admissible evidence, but I'm not going to say
16 right now I would completely exclude anything, but
17 they'd have to be mighty, mighty careful.

18 And if that comes up, Mr. Swett, that y'all see
19 that -- feel like you need to raise something along
20 those lines, you know, of other kinds of cancer, then
21 let's have a sidebar about that when the piece of
22 evidence comes up so that I would be sure that we're
23 not tying it to, hey, they have been sued about
24 something before. That would not be proper.

25 MR. FINCH: That wasn't our intent. Our argument

1 is basically two points.

2 May I approach so I can be -- can you hear me,
3 your Honor?

4 THE COURT: I can. I got the hearing aids tuned
5 up pretty good.

6 MR. FINCH: Okay. So our argument is, basically
7 it's the fact that Johnson & Johnson was on notice of a
8 potential ovarian cancer problem and they're
9 investigating their talc is no different than in a
10 mesothelioma case that a defendant was on notice of the
11 fact that breathing asbestos can cause a problem.

12 THE COURT: You don't need to go further. I get
13 that argument, and I don't want to completely preclude
14 you, but how you're going to present why they were on
15 notice is what I'm inquiring about because they're not
16 going to be on notice if it's just the fact that they
17 were sued or even that a verdict was rendered.

18 MR. FINCH: No, no, this has nothing -- this goes
19 back 40 years.

20 THE COURT: That's some kind of evidence out of
21 their files or --

22 MR. HERNS: It has to do with a different disease.
23 We're talking mesothelioma with Ms. Johnson, her
24 breathing in, allegedly, asbestos dust in baby powder
25 and then ovarian cancer that comes in --

1 THE COURT: Generally gotten by use of talcum
2 powder as a feminine hygiene product. I get there is a
3 different way of entry into the body of the material,
4 and I've got some sensitivity to that.

5 So, again, I will have to see what they're talking
6 about. My inclination is not to let it be done, but
7 I'm not going to close the door until I see is there
8 some document out of their files or something that I
9 think constitutes notice fairly enough and related
10 enough.

11 So what I'm telling you is I'm not going to close
12 the door completely, but I'm very hesitant to let other
13 scary kind of diseases, like ovarian cancer, get into
14 the picture unless I see a piece of evidence that I
15 think is fairly admissible in this case.

16 MR. HERNS: Thank you, your Honor.

17 MR. SWETT: And just way of example, your Honor,
18 we attached -- most of it's going to be internal
19 documents. There is a question-and-answer document
20 from 1985 where Johnson & Johnson prepared these
21 questions and proposed answers to media if any of these
22 questions came up. And the fact that they were
23 preparing answers for questions like, you know, talc
24 has been linked to cancer in this journal, to ovarian
25 cancer, and there's questions like, well, what's the

1 relationship between talc and ovarian cancer? And then
2 talc is closely related to asbestos. Is it likely the
3 two react in the same way?

4 So that's certainly from their internal file --

5 THE COURT: I know. And if we get to the point
6 where you're going to offer that into evidence, I'm
7 going to want to take a real good look at the document
8 before I make it on the basis of this motion in limine.

9 MR. FINCH: Also, if I understand your Honor's
10 ruling, if in some way the --

11 THE COURT: Right now I'm not granting his motion
12 in limine. So y'all need to just kind of cool it for a
13 minute. But I'm telling you that I'm not going to
14 permit this to just go to the jury until I have a
15 chance to look at the specific thing you're talking
16 about. You got me?

17 MR. FINCH: Yes, your Honor.

18 THE COURT: Okay. All right.

19 MR. HERNS: Number 4, your Honor, we have reached
20 an agreement. Mr. Swett is not to highlight the
21 accessory minerals noted on the notice or knowledge
22 documents --

23 THE COURT: Excellent.

24 MR. HERNS: -- and so that was not an issue.

25 Number 5, any references to foreign regulatory

1 actions, including Health Canada, Mr. Swett has agreed
2 not to reference the Health Canada draft screening
3 assessment, nor will he reference foreign regulator
4 actions in his opening or closing.

5 Number 6, any reference to irrelevant cosmetic
6 talc products containing asbestos that plaintiff was
7 not exposed to, including Claire's makeup. Mr. Swett
8 has stated he will not reference the FDA findings
9 concerning Claire's makeup, but we would like to be
10 able for Dr. Sanchez to give some general background
11 information about talc, not associating it with
12 Mrs. Johnson, but just give some background information
13 as to how talc is used and has been used.

14 THE COURT: I don't have any problem with that,
15 and he did that before, so I don't think that would run
16 afoul of this.

17 MR. SWETT: The only clarification on my agreement
18 with the Claire's and Justice, finding asbestos in
19 those products, there is one document that I'm not
20 going to move it into evidence, but I want to use it as
21 a demonstrative document.

22 As you know, there is an issue in this case.
23 Dr. Hopkins will say that the FDA doesn't regulate
24 talc; the FDA could have withdrew it if there was any
25 asbestos in it. Well, there is an FDA document which

1 in and of itself is a hearsay exception. It's
2 Statement from FDA Commissioner, Director of the Center
3 for Food Safety and Applied Nutrition, on tests
4 confirming a 2017 finding of asbestos contamination in
5 certain cosmetic talc products and new steps that FDA
6 is pursuing to improve cosmetic safety. That's dated
7 March 2019, this year.

8 There are statements in this document. I don't
9 intend to put it in front of the jury, but this just
10 happened last Friday in a trial --

11 THE COURT: I haven't looked at it yet, so my
12 ruling is going to be Claire's makeup is out. If
13 there's some FDA document, and that FDA document is
14 kind of late in the game, in my view, but I'll take a
15 look at it. So I'm not going to rule on this document
16 right now.

17 MR. SWETT: Right, your Honor. I just want to
18 clarify, I did make an agreement with Mr. Herns, but it
19 did not include what I was trying to just clarify. It
20 didn't include being able to cross-examine Hopkins.
21 For example, in this document, the FDA says: We don't
22 regulate talc. We can't remove a talc product from the
23 market if it contains asbestos.

24 That's directly relevant in this case. And that's
25 the only admissions from the FDA I wanted to use with

1 Dr. Hopkins.

2 THE COURT: I gotcha. And that doesn't have
3 anything to do with what we've been talking about, so
4 that's fine. We'll fight that battle when we come to
5 it.

6 All right. Below-the-waist, I have taken that
7 out.

8 MR. HERNS: That's been addressed.

9 Number 8, any reference to any alleged defect or
10 litigation concerning Johnson & Johnson non-talc
11 products. We're in agreement with that, and Johnson &
12 Johnson will not reference any actions it took
13 addressing the issues with non-talc products.

14 THE COURT: Great.

15 MR. HERNS: Number 9 has been addressed. That was
16 addressing plaintiff's P535, improperly going after
17 demographic characteristics. That's the Hispanics and
18 the African-Americans. We have already addressed that.

19 THE COURT: Yeah, but I'm going to say this:
20 We've talked about the admissibility of that document.
21 But any reference to preying on people of color, being
22 a racist or a sexist corporation or anything like that,
23 as you know, is not something I would permit one bit.

24 MR. HERNS: Yes, ma'am.

25 THE COURT: So that would be way, way a bridge too

1 far.

2 MR. HERNS: The last one, number 10, exclude all
3 internal Imerys and Cyprus documents and testimony.
4 The history is in 1988, Johnson & Johnson sold the
5 Windsor talc mines to Cyprus mines. The mines were in
6 Vermont. There has been no relationship between Imerys
7 and J&J. They're distinct and separate entities with
8 their own corporate beings, and at no point has Imerys
9 or Johnson & Johnson been married at the hip. They
10 have had no corporate relationships with one another.

11 Johnson & Johnson had no control over the input or
12 drafting of the documents that Imerys made, and they do
13 not contain any statements made by Johnson & Johnson.
14 They're internal documents of Imerys only and squarely
15 hearsay pursuant to Rule 802. The statements do not
16 fall under any exception to the hearsay rule. In order
17 to be a party opponent exception, it's got to be the
18 party opponent.

19 THE COURT: I agree, and I tell you what. I was
20 kind of nervous in the service about the Imerys and
21 Cyprus documents in Boyd-Bostic, but I justified it on
22 the basis they were a party at the commencement of the
23 trial. And, therefore, I allowed it as party
24 opponent-type documents. They are out now.

25 MR. HERNS: They're out now.

1 THE COURT: Mr. Swett.

2 MR. SWETT: Your Honor, I've got two Imerys
3 documents, the only two that we sought to admit in this
4 case. They fall squarely within hearsay exceptions.

5 THE COURT: What are they?

6 MR. SWETT: I have copies, your Honor. I can
7 bring them up. You have previously allowed these in.
8 P5 and P14.

9 Your Honor, I can argue the basis of admissibility
10 when you're ready.

11 THE COURT: All right. Tell me about it.

12 MR. SWETT: Your Honor, Plaintiff's Exhibit 5 is a
13 lab report. This is a dispute between -- Johnson &
14 Johnson owned Windsor Minerals. This is when they
15 owned Windsor Minerals. It's a dispute between Windsor
16 Minerals and the Illinois EPA. Cyprus came in and
17 tested the mines, Johnson & Johnson's mines, and they
18 found tremolite asbestos in the mines.

19 So, one, it's offered for non-hearsay purposes.
20 It's offered for notice. Johnson & Johnson can't say
21 they didn't have notice of this. They were involved in
22 this dispute. This is a dispute between their mines.
23 They certainly knew about this.

24 But, regardless, if it's hearsay, it falls
25 squarely into the hearsay exception under 803(16),

1 ancient document exception. It's 20 years or older.
2 It's of apparent authenticity because it's right out of
3 Cyprus' files, and we have got the Cyprus corporate
4 representative, Pat Downey, who authenticates this
5 document. We have got that deposition. We can play
6 that deposition in court to authenticate this document
7 if we need to.

8 It's also a business record of Cyprus. We have
9 Pat Downey admitting that in this deposition. So this
10 document falls squarely within a hearsay exception, and
11 it's very relevant in this case because this is Johnson
12 & Johnson's mines that Cyprus found asbestos in.

13 THE COURT: All right.

14 MR. SWETT: The second document --

15 THE COURT: How about 14?

16 MR. SWETT: The second document is again an
17 ancient document, falls within 803(16), more than
18 20 years old. It is from Imerys' files. You know,
19 Dr. Hopkins has testified he's familiar with this
20 document. He's been cross-examined with this document
21 multiple times now in court. I have done it in every
22 trial I have been in. It basically shows that they
23 were on notice that there is asbestos in the
24 Hammondsville mine and the Argonaut mine. Those are
25 the mines that the asbestos came from for the baby

1 powder. All we need is one hearsay exception, and we
2 have got the ancient document exception.

3 THE COURT: So you also add to this, this was the
4 mine from which their product was sourced, and you're
5 saying that Dr. Hopkins, the corporate representative
6 of J&J, is familiar with this document and familiar
7 with the analysis contained of the material that was
8 supplied to his company from these mines?

9 MR. SWETT: Yes, your Honor. He's testified about
10 this document in every trial. His response is -- he
11 has no response to the Hammondsville, but he says the
12 Argonaut mine in here, the East Argonaut wasn't the
13 mine that the talc came from. He differentiates. But
14 still he's familiar with this document and it falls
15 within a hearsay exception.

16 MS. BROWN: Your Honor, if I could, there's
17 something a little bit unfair here. He's familiar with
18 the document because plaintiff's counsel has shown it
19 to him. This is not a document that plaintiffs have
20 any evidence that ever went to Johnson & Johnson in the
21 ordinary course. This is a document that they have
22 taken from another company's files who is not present
23 in this case to explain or contextualize or give any
24 testimony about this document, and they put it in front
25 of Hopkins, and that's the only reason he has seen it

1 before.

2 THE COURT: Are you saying that with respect to 14
3 and 5 or just 14?

4 MS. BROWN: Yes, your Honor. No evidence that
5 either of those documents ever went to Johnson &
6 Johnson. And Imerys isn't here. What's different
7 about this case than the Boyd-Bostic cases is no one is
8 here to get up and explain or contextualize.

9 THE COURT: With respect to the Windsor mines, J&J
10 owned those mines, so --

11 MS. BROWN: Up until 1989, correct, your Honor.

12 THE COURT: Right. So the document -- the first
13 one, P5, comes in.

14 MS. BROWN: Understood.

15 THE COURT: P14 --

16 MR. HERNS: We had sold the mine in '88, your
17 Honor.

18 THE COURT: Uh-huh. Were you still using material
19 from that mine? Yes.

20 MS. BROWN: Yes, they were our supplier, Judge.
21 But in terms of the internal company documents that
22 were made after we sold it, that never went to us. How
23 would we know --

24 THE COURT: Well, that's going to depend on what
25 Hopkins says. So I'm going to reserve ruling on that

1 one. 5 comes in. 14 is questionable. Let's see what
2 Hopkins says.

3 MS. BROWN: If they can lay a foundation with
4 Hopkins.

5 THE COURT: That's right.

6 MS. BROWN: Understood.

7 MR. SWETT: Well, your Honor, just for
8 clarification on 14, we're not offering that for
9 notice. That is a separate hearsay exception. That is
10 a business record and it's an ancient document. It
11 doesn't matter if Johnson & Johnson was aware of it.

12 THE COURT: Yeah, but -- this Windsor mine one,
13 number 5, they owned it at that time. It's their
14 business record. They didn't own this mine at this
15 time.

16 MR. SWETT: Right, but they were -- that was --
17 the talc that they were using for the baby powder was
18 being supplied from that mine.

19 THE COURT: I understand, but did they know about
20 this report? Was it in their records?

21 MR. SWETT: It doesn't matter because we're not
22 offering it for notice. We're offering it as a
23 separate hearsay exception for the truth of the matter
24 asserted that these mines did have asbestos in them.
25 We have an exception for that.

1 THE COURT: Are you just going to get it in as an
2 ancient document?

3 MS. BROWN: There's no foundation, Judge. They
4 need to lay foundation for the witness. That's the
5 problem without Imerys.

6 MR. SWETT: I have the Pat Downey deposition.

7 MS. BROWN: You have to authenticate. That
8 doesn't lay foundation to use this document.

9 THE COURT: No. There is a difference in that.
10 All right. But I'm not going to get into those -- I
11 have already told you what I'm going to do. I'm going
12 to look and see what happens when we try this case.

13 5 is in. 14 is probably in, but I'll wait and see
14 what happens foundationally when we get there.

15 Okay. So number 10, I think we have resolved all
16 we need to resolve about 10, because the two documents
17 we're talking about that 10 refers to are the ones that
18 are up here right now.

19 MR. SWETT: That's the only ones, your Honor.
20 That's all the Imerys Bates-stamped documents that we
21 intend to --

22 THE COURT: I gotcha.

23 MS. BROWN: All right.

24 THE COURT: Gotcha. Okay.

25 Now, what else have we got, Louis, in terms of

1 J&J? We got Longo. We did omnibus and punitive
2 damages.

3 MR. HERNS: Yes, your Honor. That's the last one.

4 THE COURT: Hang on.

5 MR. HERNS: Your Honor, we're going to rest on the
6 papers for the motion to strike punitive damages. And
7 I understand that you will bifurcate punitive damages
8 during the course of the trial.

9 THE COURT: Right. You got your -- your position
10 is preserved and on the record, which is that you would
11 like to strike punitive damages. I decline to strike
12 them at this time. I think that would be premature.
13 But I will bifurcate, just as I have done in the past.
14 That means we will not discuss anything -- the only
15 thing that will be said in the first part of the trial
16 on liability is the jury will be voir dired on the
17 verdict form and asked to -- if they find any liability
18 on the part of J&J, then they will be asked whether the
19 conduct was willful, reckless or wanton. And if they
20 say yes to that, and only if they say yes to that, will
21 we proceed. But they will not otherwise be instructed
22 about punitive damages and everything.

23 You are very familiar with that methodology. And
24 that's how I will do it. And to the extent you want
25 something further, you put it in this motion. Your

1 position is protected.

2 MR. HERNS: Thank you, your Honor.

3 THE COURT: All right. So we have got that.

4 Now, have we done everything in J&J?

5 MR. HERNS: I believe so, your Honor.

6 THE COURT: Now, y'all have got -- Louis has
7 supplied me with a trial -- a confidential trial memo
8 and verdict form and --

9 MR. HERNS: Voir dire.

10 THE COURT: -- voir dire. And I'm not going to go
11 through all the voir dire right now.

12 Y'all are very familiar with how I charge these
13 things. We will try to have a little charge conference
14 before we get started here.

15 Thank God we're trying this thing in Richland
16 County, due to my years, but it will be quick because
17 y'all pretty much know what I do about voir dire.

18 Plaintiff has submitted more detailed voir dire
19 where they want me to pin the jury down on their
20 attitudes about whether they could find a company like
21 J&J -- whether they believe that they could ever find
22 if they had asbestos in their baby powder and this kind
23 of thing. I don't get that specific and try to nail a
24 jury down.

25 As both sides know, I will try to ask them some

1 general questions to determine whether or not they can
2 be fair. And I will have those up for y'all and Walker
3 will distribute them to you before we select the jury.
4 I try to get them out to you by e-mail. And then if
5 y'all have got some heartburn about them, you can take
6 a look at them, and we can talk about them before we
7 select the jury.

8 What else do we need, Mr. Swett?

9 MR. SWETT: I have two more issues. May I just
10 approach with our pretrial materials?

11 THE COURT: Yes, sir.

12 MR. SWETT: I've got plaintiff's final witness
13 list, plaintiff's proposed voir dire, plaintiff's page
14 and lines, our final exhibit list, and our verdict
15 form.

16 THE COURT: Wonderful. And thank you for giving
17 me a hard copy. I saw them in your e-mail.

18 And can I depend upon you, Louis, to get me that
19 material, or is it in what you handed me?

20 MR. HERNS: Yes, ma'am. I will get you that
21 material and have it ready to go, probably send it to
22 you this week.

23 THE COURT: Okay. Now, I'm looking at this final
24 witness list and -- well, it looks like you're staying
25 within the lines that we talked about, Mr. Swett,

1 numbers-wise and time-wise.

2 I'm going to be a little fiercer than I've been in
3 the past about keeping everybody to timelines and, you
4 know, trying to move this thing along. As you-all
5 know, you don't have a three-week judge and you don't
6 have a four-week judge. You've got a two-week judge.
7 And I feel fully confident that we will get this matter
8 resolved in that time frame, if by any chance a miracle
9 does not occur and y'all settle this case.

10 MR. SWETT: There's one issue that sort of relates
11 to that that we have been trying to work on is -- you
12 know, if you remember the last trial, we had some
13 admissions that you allowed us to play so that we don't
14 take so long with Dr. Hopkins. They agreed to those,
15 you know, short video clips, and we agreed to let them
16 bring Dr. Hopkins out of turn and put him -- basically,
17 do their direct of him in our case, and then we
18 cross-examine him one time instead of calling him as an
19 adverse witness, then putting him up in our case and
20 cross him.

21 So we're trying to work on that. I think he's
22 available Thursday. We would be willing to allow them
23 to put him on the stand out of turn with an instruction
24 to the jury very early on Thursday. They do their
25 direct, we'll cross him, we'll finish Hopkins on

1 Thursday.

2 THE COURT: That's great. I think that makes a
3 lot more sense, and I certainly think it makes more
4 sense to the jury when you do it that way.

5 MS. BROWN: And the only reason I haven't
6 finalized that with Mr. Swett, we're waiting to confirm
7 with Dr. Hopkins himself, but we believe that will be
8 the day.

9 THE COURT: That would be highly satisfactory if
10 it can be done that way. Okay.

11 MR. SWETT: The only other issue, your Honor, I
12 think -- you know, we're trying to streamline
13 everything today so we don't have to worry about it at
14 trial. We had a list of documents we're seeking to
15 preadmit. I don't know if I gave a copy of that.

16 THE COURT: Yes.

17 MR. SWETT: I think there's only a handful of
18 objections. If we can go ahead and maybe rule on those
19 and I can put that in the record so we have all that
20 straightened out.

21 THE COURT: All right. I'm looking at it. So
22 which ones have we got any dustup about?

23 MR. SWETT: I don't know yet, but as they're
24 announced, I can give you a copy.

25 MS. BROWN: So, your Honor, the first one to

1 address is Plaintiff's Exhibit 31.

2 THE COURT: Hang on. Plaintiff's Exhibit 31.

3 MS. BROWN: Two brief objections to this document.

4 Number one, this document is not complete. And so
5 what you're seeing is something that was taken out of a
6 much larger 20 or 25-page document.

7 And so I object, one, on the fact that it's not a
8 complete document. But, two, what the entire document
9 makes clear is that this is a document about mines in
10 Korea, India, Brazil, Austria and Kashmir that were
11 used to supply other places around the world and have
12 no bearing on the issues in this case regarding U.S.
13 talc.

14 And so I would submit, one, it's incomplete, and,
15 two, there would be an attempt by plaintiffs to use
16 what they're saying about these other worldwide sources
17 to mislead or confuse the jury that that had anything
18 to do with what was going on in Vermont and Italy.

19 MR. SWETT: Your Honor, this document applies
20 worldwide. They're saying worldwide. They even
21 reference their Windsor mines. As this document --
22 Hopkins has laid the foundation that this document is
23 from 1978. In 1978, they had, quote, no control system
24 to prevent asbestos contamination at levels detectable
25 by TEM in our finished product worldwide.

1 MS. BROWN: And, your Honor, that is just belied
2 by --

3 THE COURT: Well, here is what the thing says: 65
4 percent of our product worldwide is made from U.S.
5 sourced, Windsor mine, WMI, talc.

6 And then it goes on: In the U.S., and Italian
7 sourced talc, we have excellent long-term audit
8 information.

9 So I think this document speaks for itself. I
10 think it's got something in it for both sides. I will
11 overrule the objection. It's admitted.

12 MS. BROWN: And, your Honor, can it be admitted in
13 its complete form? We're missing, like, 25 pages.

14 THE COURT: If y'all want to junk up this record
15 with something the jury is not going to read, you can
16 do that, but I'm not dealing with that right now. I'm
17 just dealing with this. This comes in. Y'all can
18 decide what you want to do with the rest of it.

19 MS. BROWN: I understand, Judge.

20 The next one would be Plaintiff's 87.

21 THE COURT: 87?

22 MS. BROWN: Yes, Judge.

23 THE COURT: All right.

24 MS. McVEY: Chief Justice, may I interrupt for
25 just a second? Are you going to take a lunch break

1 before we reach Sizemore, do you think? I'm just
2 wondering if --

3 THE COURT: Yes, I have to. I'm sorry.

4 MS. McVEY: That's all right. You-all can keep
5 going. I just want to know if the rest of us can sneak
6 out.

7 THE COURT: Well, yeah. What time is it?

8 MS. BROWN: 12:15.

9 THE COURT: Oh, man. How many have we got?

10 MR. SWETT: It looks like only four or five, your
11 Honor.

12 THE COURT: We will be back here at 2:15 or
13 thereabouts.

14 MS. McVEY: Yes, ma'am. Thank you. Sorry for the
15 interruption.

16 THE COURT: All right. Keep going.

17 MS. BROWN: Plaintiff's 87.

18 THE COURT: All right. I got it.

19 MS. BROWN: My objection here, your Honor, has to
20 do with a little bit of what we discussed this morning,
21 which is this idea of other injuries not involving
22 those claimed in this case.

23 And so what this document clearly, by the subject
24 line, is talking about is the risk of aspiration in
25 kids. And what happened around this time, 1966, there

1 was an issue with the cap on baby powder, and it led to
2 two changes: One, a warning went on the product about
3 children dumping it close to their face and they could
4 choke, and two, J&J changed the top to make it safer
5 for kids. But the prejudice of using this document to
6 suggest that talc is dangerous when it talks about
7 something completely different that's not at issue in
8 this case, and therefore we object on the prejudice
9 grounds and irrelevant.

10 THE COURT: Overruled. Admitted.

11 What's the next one, Mr. Swett?

12 MS. BROWN: I had two objections, your Honor, to
13 the Blount article. I understand your Honor's prior
14 ruling is that the article itself goes back to the
15 jury.

16 THE COURT: What exhibit is it?

17 MS. BROWN: I have two. And what Mr. Swett
18 identified is 157 and 158.

19 MR. SWETT: This is the Blount article from
20 Johnson & Johnson's own files with the cheat sheet on
21 the back, your Honor, the key. They want to keep it
22 out.

23 THE COURT: All right. And it's got that key that
24 everybody keeps worrying about. I understand the
25 objections. Overruled. Admitted.

1 MS. BROWN: And, your Honor, on 158, it also has a
2 Cyprus fax, which would be another basis of the
3 objection on 158. Looks like there is a fax contained
4 in the back, which I would object to as hearsay.

5 THE COURT: Overruled. Admitted.

6 MS. BROWN: Along those same lines, 361, objection
7 on hearsay to a letter from Alice Blount.

8 THE COURT: I remember that one.

9 Overruled. Admitted. I mean, frankly, the best
10 thing you've got going for you is that video, they feel
11 like they've got to play it. She doesn't come off very
12 good on that one, so y'all have a little on your side.

13 MS. BROWN: Yes, Judge.

14 Final, Judge, would be 413.

15 THE COURT: Which one?

16 MS. BROWN: 413.

17 I just don't -- I don't know if this is something
18 Mr. Swett printed off the Internet. This has never
19 been authenticated. I just don't even know what it is
20 or what it purports to be.

21 MR. SWETT: Your Honor, if you look at the bottom,
22 this is --

23 THE COURT: This is USGS.

24 MR. SWETT: -- self-authenticating, specific
25 hearsay exception for a governmental document. It's

1 relevant because it shows that -- I think this is the
2 one that shows occurrence of asbestos in the Vermont
3 talc mines. And Dr. Sanchez will testify all the
4 Vermont talc mines, the mineralogy is similar. So the
5 fact that they found anthophyllite asbestos here in the
6 Vermont talc mines is definitely relevant in this case.

7 MS. BROWN: Just for the record, this is the
8 Chester talc mine. No question in this case the
9 Chester talc mine was ever used for cosmetic talc, and
10 I would object on the prejudice of attempting to
11 suggest this stands for something that's not at issue
12 in this case.

13 THE COURT: I understand that this is being
14 offered because of the testimony of Dr. Sanchez, who is
15 a principal witness of defense. Dr. Sanchez is going
16 to testify, just like he has when I've heard him
17 before, that all these Vermont talc mines are of the
18 same composition, and they want to introduce this USGS,
19 that is, U.S. Geologic Survey, Department of the United
20 States Government, document to show that there is
21 anthophyllite asbestos and questionably actinolite
22 asbestos in the Carleton quarry, which is one of the --
23 which is the Chester talc mine. And it's in Windsor
24 County, Vermont, like the Windsor talc mine is, so they
25 are introducing it for that purpose.

1 I consider that an appropriate purpose, and I will
2 overrule the objection and admit it.

3 MS. BROWN: Understood, your Honor.

4 That's all the objections.

5 MR. SWETT: So just for the record, your Honor, I
6 have a document that's entitled "Plaintiff's Exhibits
7 Pre-Admitted" that I'm going to mark maybe or add to
8 the record.

9 And just for the record, all of these are admitted
10 by consent with the exceptions of P5 was admitted over
11 objection, P31 was admitted over objection, P87 was
12 admitted over objection, P157 was admitted over
13 objection, P158 was admitted over objection, P361 was
14 admitted over objection, P14 the Court is reserving
15 ruling on, and the remaining approximately 65 exhibits
16 have been pre-admitted by consent.

17 Is that correct?

18 MS. BROWN: Correct.

19 MR. SWETT: I'll mark this as an exhibit when I
20 get a clean copy, your Honor.

21 THE COURT: Mine are going to reflect that same
22 thing now.

23 Okay. Is that it?

24 MS. BROWN: Yes, your Honor.

25 THE COURT: Are we done with J&J?

1 MR. SWETT: Do we happen to know which courtroom
2 we're going to start in, your Honor?

3 THE COURT: I will find that out, and hopefully I
4 will do a better job of finding that out and not lead
5 you astray, because you will want to work through Jim
6 Truitt to get set up the way you'd like to be set up.

7 Thank God this isn't Darlington County anymore. I
8 think we'll have an easier time of setting up the
9 technology, and certainly facility-wise it's going to
10 be easier by far than what we dealt with with those
11 poor people in Darlington that still don't have a
12 decent courthouse.

13 MR. SWETT: I apologize, one really last issue.
14 We don't have to deal with it now, but I want to raise
15 it. We had filed way back when -- I'll get you the
16 exact date.

17 March 20th we filed in the Devay and Dupree cases
18 motion to consolidate. Johnson & Johnson replied to
19 those motions on April 16th. So that is ripe. And I'm
20 not going to argue the motion right now, but I did
21 anticipate that maybe we would argue it today because I
22 don't know if we have another opportunity before the
23 July trial, especially in light of the fact that they
24 removed all those cases saying they were similar enough
25 to be overseen by one judge.

1 THE COURT: Yes, I saw your comment on that. And
2 I think, in fairness to J&J, that deserves some
3 ventilation. And we'll try to figure out a time to
4 make that happen before any July trial on it, although
5 I am very attracted to the idea of consolidation, as
6 y'all know. But I want them to be fully heard about
7 that, so we'll figure out a time convenient to all to
8 make that happen. And I'm not going to make any
9 prejudgment about these cases until I have taken a look
10 at them and given -- J&J just filed something with me,
11 didn't you, Louis?

12 MR. HERNS: Yes, ma'am.

13 THE COURT: On opposing consolidation. I want to
14 have a chance to look at that, and then we'll schedule
15 some time to deal with that.

16 MR. SWETT: Thank you, your Honor.

17 MR. FINCH: Thank you, your Honor.

18 MS. BROWN: Thank you, your Honor.

19 THE COURT: Okay. And where would we consolidate
20 them?

21 MR. SWETT: Your Honor, they are both pending in
22 the same venue, Charleston County.

23 THE COURT: Okay. Just to give me some kind of
24 heads-up as to what I would be looking at if I did and
25 how that could work down there.

1 MR. HERNS: July in Charleston is not a good
2 thing.

3 THE COURT: It's good for me because that's when I
4 start going to the beach for about a month, my beach
5 out at IOP, so I love it.

6 Okay. We'll come back on the rest of Sizemore and
7 Hopper.

8 Are there Hopper folks that are still here? Okay.
9 I haven't forgotten about you. We're going to get to
10 you, I promise. All right. Thank you.

11 (Lunch recess taken from 12:25 p.m. to 1:27 p.m.)

12 THE COURT: Are we ready to proceed on Sizemore?

13 MS. McVEY: Yes, ma'am.

14 THE COURT: We have dealt with the motion for
15 summary judgment, so now we're to plaintiff's motions
16 in limine; am I right?

17 MS. McVEY: Yes, your Honor.

18 THE COURT: Plaintiff's motion in limine number 1,
19 collateral source.

20 MR. McLEOD: Is this the omnibus motion?

21 THE COURT: Yes.

22 MR. McLEOD: Your Honor, just to make things a
23 little simpler, we will stipulate to 1, 2, 3, 4, and
24 10.

25 MS. McVEY: And 10?

1 THE COURT: And 10?

2 MR. McLEOD: (Nods head.)

3 THE COURT: All right. So that was number 5, that
4 any corporations which once made, manufactured, sold or
5 distributed asbestos are in bankruptcy. I would grant.

6 What's the problem?

7 MR. McLEOD: It's the same as it always is. We
8 agreed not to use the term bankruptcy, but to the
9 extent that there's any -- we have some affidavits to
10 bankruptcy trust in this case that we --

11 THE COURT: I gotcha. Well, overruled. Granted.
12 All right. Any reference to any rulings by
13 another court on the scope of admissibility of
14 testimony of any witnesses.

15 Why aren't we granting that, Mr. McLeod?

16 MR. McLEOD: Your Honor, same as we always do,
17 just to the extent that they open the door to it to
18 bolster the credibility of their own witnesses, we
19 would --

20 THE COURT: Well, they're not going to do that.
21 They're going to qualify them as an expert, so it's
22 granted.

23 Any questions to experts to define causation. I
24 would grant that. We don't ever let the experts give
25 the instructions to the jury, but we do allow them to

1 testify as to causation. That's what experts do. So
2 that's granted.

3 Any mention or reference to the other defendants
4 not present sued by the plaintiff. That's the *Smith*
5 *vs. Tiffany* issue that we continue to be in
6 disagreement about. Granted.

7 MR. McLEOD: As long as it's on the record that
8 it's over our objection.

9 THE COURT: Over your objection. No question
10 about it, Mr. McLeod.

11 Felonies and convictions not involving dishonesty
12 or moral turpitude.

13 MR. McLEOD: We have actually got a larger stand
14 on its own motion on this, so I suggest we wait, pass
15 on this.

16 THE COURT: Just defer on this.

17 All right. Past alcohol use, we have agreed.
18 Tobacco use or smoking. Well, he smoked. I don't
19 allow them to ask questions about, hey, you didn't obey
20 the warnings on cigarette packages, so no warnings
21 wouldn't be any good. I know y'all would like to
22 pursue that. I would grant.

23 MR. McLEOD: Over our objections, of course. We
24 think we should be allowed to go into that. And to the
25 extent that tobacco use goes to life expectancy, it's

1 relevant to the case.

2 THE COURT: I agree. I understand your argument,
3 and I will grant the motion.

4 Other nonlife-threatening medical conditions.
5 There isn't any person who will testify that any of
6 this other stuff caused his death, so I would grant.

7 MR. McLEOD: Over objection.

8 THE COURT: Over objection.

9 Asbestos generally as the cause of Mr. Sizemore's
10 mesothelioma. That's what the experts say. That's
11 what the medical experts say.

12 MR. McLEOD: Well, your Honor, that's not
13 necessarily true, but in this case, I don't believe
14 that we're contesting the diagnosis.

15 THE COURT: Okay. Very good.

16 Any mention of asbestos use being patriotic,
17 winning the war. Well, nobody has ever done that. I
18 would grant that.

19 And any mention of any asbestos-related lawsuit
20 filed by the decedent of the plaintiff. Well, Smith
21 and Machin govern that. I know the defendants
22 disagree. I would grant over their objection.

23 MR. REID: Your Honor, if I may just touch on that
24 one.

25 THE COURT: Certainly, Mr. Reid.

1 MR. REID: And we can wait until trial to craft
2 how we do this, but Mr. Sizemore did have a 2000 or
3 1999 asbestosis suit. And we don't need to go into the
4 details there, but the testimony will be used.

5 THE COURT: Testimony can be used. We always
6 figure out a way to do that that masks any reference to
7 other litigation. But I'm certainly not going to
8 preclude the use of testimony that's under oath from
9 him even if it was in another matter. That can be
10 done.

11 MR. REID: Thank you for the clarification.

12 THE COURT: All right. That's the first one.

13 Then this is number 2, plaintiff's motion in
14 limine to exclude evidence defendant lacked knowledge
15 asbestos caused mesothelioma.

16 What are we talking about?

17 MR. McLEOD: Are you going to go?

18 MR. BRANHAM: I'm happy to follow you.

19 MR. McLEOD: This is the same motion. This was
20 filed in, Taylor, Jolly, Waters, Glenn. The Court has
21 routinely rejected this. Whether or not these
22 defendants were aware goes directly to the facts of
23 case. It's a question of fact for the jury.

24 MR. BRANHAM: Over our objection, your Honor.

25 THE COURT: All right. Denied over their

1 objection.

2 Three.

3 MR. REID: Your Honor, just -- counsel and we
4 agreed we would keep it short. I think most of these
5 are offered by the Court's past rulings, and this is
6 one I think the parties will agree that we're not
7 contesting compliance with OSHA is conclusive. We're
8 contesting it's relevant, and I think they will rely on
9 their brief.

10 MR. BRANHAM: True.

11 THE COURT: So --

12 MR. REID: The Court has permitted this in the
13 past.

14 THE COURT: Yes, that's correct. So I deny.

15 Four, plaintiff's motion in limine to exclude
16 improper comments and questions by defendants and their
17 witnesses. All those things are things I would not
18 allow. Background asbestos is fine, but none of the
19 specifics about them breathing it, there's asbestos in
20 the courtroom, you have it in your lungs, at risk,
21 fibers in common household products. I would grant
22 with regard to that.

23 Five.

24 MR. BRANHAM: They just have to have evidence of
25 what they're going to say?

1 THE COURT: Yeah, you will make an offer of proof.
2 So granted, which simply means that they are not
3 precluded, but they have got to make an offer of proof
4 that shows that they've got --

5 MR. BRANHAM: There's going to be plenty of
6 evidence of other asbestos.

7 MR. McLEOD: It's not really an issue.

8 THE COURT: No big deal here.

9 Six.

10 MR. REID: I think this is one you routinely
11 denied, your Honor.

12 THE COURT: That's right. Denied. They want to
13 exclude unduly speculative and unreliable opinion
14 testimony related to evidence. And the kind we're
15 talking about is the reconstruction, safe level,
16 potency, literature.

17 Seven.

18 MR. BRANHAM: Judge, this is one we actually do
19 disagree about and we need to argue about a little bit.

20 So the motion here is to exclude criminal history
21 of Mr. Sizemore. To just give you a little bit of
22 background, as the Court knows, Mr. Sizemore was
23 deposed over a total of about ten days. He was asked
24 on a couple of different occasions, if memory serves,
25 whether he had been convicted of anything. And he

1 actually said yes to a number of things. I think one
2 was assault and that sort of thing.

3 Then there was -- and I think it was right at the
4 end of the deposition where he was asked if he had ever
5 been convicted of conspiracy. And he said no, and he
6 was adamant about it. And the defendants had some
7 record that they showed him and he again denied it.

8 And so just for completeness sake, and I
9 understand it's not in the record, but what Calvin told
10 me was, he said, I think that was my brother, but it
11 was not me. I mean, he was very serious about it not
12 being him. And the fact that he had admitted to other
13 criminal convictions in the past I think lends some
14 credibility to that issue.

15 But now what they're trying to do is somehow say,
16 well, he was convicted of a conspiracy, he didn't admit
17 it, we ought to be able to get that in in order to make
18 him look like a bad guy.

19 I don't think that's what the law of South
20 Carolina says. First of all, a conviction, as I
21 understand it --

22 THE COURT: It was more than ten years old?

23 MR. BRANHAM: It was more than ten years old. And
24 also conspiracy has not been defined as a crime of
25 moral turpitude. And so I think you have those two

1 things. And even if either one or both of those things
2 was not true, I think the Court still has the
3 discretion to look at it and say, is this relevant to
4 anything? Does it make him -- should it be admitted?
5 Is it more prejudicial? And I think it's clearly more
6 prejudicial, particularly when he was willing to admit
7 his other issues.

8 THE COURT: Mr. McLeod.

9 MR. McLEOD: I'll take this one, your Honor.

10 We disagree with the plaintiff's take on it.
11 First of all, it was conspiracy to obtain prescription
12 drugs. And it is inherently dishonest, so we disagree
13 entirely on their analysis that this particular
14 conspiracy doesn't involve dishonesty.

15 Importantly, the records that we have obtained say
16 that it happened in 1996. And in his deposition just a
17 few years later, he denied it but then later admitted
18 to it. And the same thing happened in the most recent
19 2016 depositions.

20 So not only does the actual conviction itself
21 represent dishonesty in the type of conspiracy that it
22 was, we're able to use this to impeach his telling the
23 truth in his deposition, which is inherently so
24 important in this case given all of the incredible
25 testimony that Mr. Sizemore gave. It just doesn't make

1 any sense, okay. He testified to being exposed to
2 insulation from a boiler the same year of this
3 conviction. The boiler wasn't even installed until
4 '86. And the record is replete that he was aware of
5 asbestos and the dangers of asbestos in the '80s.

6 So his credibility is at the heart of this case.
7 Not only is it admissible because it's a crime
8 involving dishonesty, it's also admissible because he,
9 right there in the deposition, he didn't tell the truth
10 about it. Or his statements are inconsistent, and
11 pursuant to, of course, Rule 32, we can use the
12 deposition for any purpose to impeach him on his
13 credibility.

14 So we think that this is not sort of the normal
15 situation because he wasn't -- according to the
16 transcripts, he wasn't honest in his deposition. And
17 given that we're talking about testimony, his testimony
18 is critical to the products that he's identified, the
19 products in our case that he hasn't identified, and so
20 his testimony is critical.

21 So because of that, the credibility of that
22 testimony is really outweighed by any prejudicial --
23 prejudice that it may cause to the plaintiffs. That's
24 our position.

25 MR. BRANHAM: Judge, again, I mean, I understand

1 why Mr. McLeod wants to use it, but I don't think
2 wanting to use it is good enough to be able to use it.
3 Right?

4 What he's trying -- I mean, in fact, when you
5 listen to what he says, he wants to be able to say our
6 client wasn't telling the truth when he said he didn't
7 remember Crosby products. So is that what we're trying
8 to do here? Because that doesn't make any sense.

9 But at the end of the day, we're more than ten
10 years old. The records in this case about where he
11 worked and what he worked on and things that he did
12 match up. So there really isn't the indicia of
13 untruthfulness to Mr. Sizemore.

14 He admitted to prior crimes. He said he didn't,
15 and I agree that it is inconsistent. So now the
16 question for the Court is: Is it something that should
17 be admitted because it is not unduly prejudicial? It's
18 your decision. You have the discretion to make this
19 decision, and I think if you look at the overall
20 prejudice from bringing in a conviction that he did
21 deny but isn't relevant to anything that's going on,
22 and there is nothing in South Carolina law that
23 establishes conspiracy as a crime of moral turpitude,
24 which is what's required in order to admit the
25 conviction.

1 THE COURT: All right. I'll grant it over
2 objection.

3 Nine -- 8, exclude reference to his children's
4 criminal history.

5 MR. McLEOD: We responded to both of those motions
6 together, your Honor. Our argument was strongest for
7 Mr. Sizemore because he was inconsistent in talking and
8 admitting he was arrested. So I presume if you denied
9 the first, you're going to -- or grant the first,
10 you're going to grant the second but over our
11 objection.

12 THE COURT: Granted over defendants' objection.

13 MR. BRANHAM: Judge, this next one is corporate
14 representative hearsay. I know we have talked about
15 this before, but there is -- I want to -- there's been
16 something that's come up in discovery that I just want
17 to point out to your Honor about why this is a proper
18 motion.

19 So Mr. Martin, who is Crosby's corporate
20 representative, has been testifying for a long time in
21 many cases saying: We were competitors with
22 Consolidated valves. We didn't use their valves and we
23 didn't sell their valves, and whatever they said to do
24 with their valves is different than what we did with
25 our valves. And this comes down in large ways to

1 whether you insulate the valves or not.

2 So we found a sales record demonstrating that
3 Foster Wheeler, which is a boiler manufacturer, was
4 purchasing Consolidated safety relief valves from
5 Crosby, which is directly contradicted by what
6 Mr. Martin has been testifying to in case after case
7 after case. He says it never happened.

8 And so now we know that to be untrue, that it, in
9 fact, did happen. And this is the reason why corporate
10 representatives cannot come to court and talk about
11 things about which they have no personal knowledge,
12 because he doesn't know. He just has learned that they
13 never sold Consolidated valves. Turns out that's not
14 true. And then when you confront him about it: Now
15 you agree you were selling Consolidated valves, right?
16 Because we have these invoices that shows you were.

17 And he's like: Well, I've never seen -- that's
18 the first time I've ever seen that, and I certainly
19 can't agree that as a matter of -- of course we were
20 doing it. Right?

21 So unless I can prove in every instance for every
22 year and every day of every year, he's never going to
23 admit that Crosby was selling Consolidated valves when
24 I have some evidence that they were and he has no
25 personal knowledge that they were not.

1 And so this is exactly the type of thing that
2 we're trying to get at with a corporate hearsay rule.
3 And you granted this before. This is not a new motion.
4 But he has to come here with personal knowledge. He
5 can't just make it up any more than Mr. Sizemore could
6 do it.

7 MR. REID: Your Honor, I was prepared before I
8 heard those specific comments to say something to the
9 effect that at the Glenn trial, we had no issue ever
10 arise in this respect with Crosby.

11 THE COURT: That's correct.

12 MR. REID: And I think it's best handled on a
13 question-by-question basis at trial. Even in light of
14 those comments, my position remains the same, and I
15 think the Court would be well advised to look at that
16 exhibit when it has a chance to see it.

17 What it is, is a purchase order from somebody else
18 from 1952 which uses the name Consolidated. I don't
19 know if it's because whoever wrote the purchase order
20 to Foster Wheeler is treating it like Kleenex or
21 something interchangeable with a Crosby valve, which is
22 elsewhere described on that invoice.

23 There's absolutely no proof that we ever had a
24 relationship with Consolidated. Mr. Martin has been
25 with Crosby since 1972 or '74. I can't remember

1 exactly the year he started, but he will testify: In
2 my term with the company, we've never had a
3 relationship with Crosby, and I think -- with
4 Consolidated. And I think it's best for the trial --
5 for the Court to hear that in context, hear it in the
6 context of the larger testimony which is given and make
7 a ruling on that sort of specific point at trial.

8 So this is one I would respectfully say either it
9 be denied and the Court can handle on it a
10 question-by-question basis, and if things pan out like
11 they did --

12 THE COURT: Well, this is targeted to a particular
13 issue, so I'll defer and look at the document before I
14 make a ruling on it. If it was kind of a generalized
15 thing, I would stick with what I've done in the past,
16 but you're talking about something very specific. So
17 let's just take a look at it. I'm fine with that,
18 Mr. Reid.

19 MR. BRANHAM: Thank you, your Honor.

20 MR. REID: Just to jump to number 10.

21 MR. BRANHAM: I don't think it's an issue.

22 MR. REID: We're not going to go there.

23 THE COURT: Withdrawn?

24 MR. BRANHAM: Yes, your Honor.

25 THE COURT: Number 11.

1 MR. BRANHAM: Judge, I don't think there is a
2 number 11. I think that's it.

3 THE COURT: This is an easy way to do it, just to
4 list the rulings that were made in these other cases.

5 Do we simply want to put that in the record and do
6 it that way?

7 MR. BRANHAM: I think that's fine.

8 MR. McLEOD: I don't know what she's looking at.

9 MS. McVEY: It's the list of prior rulings.

10 MR. McLEOD: Did I get that?

11 THE COURT: If you will look on the index to
12 motions in limine briefly ruled on by the Court in
13 prior cases, this is strike punitive damages from
14 plaintiff's complaint or bifurcate, is the first one.

15 Of course, I always bifurcate in the way that I
16 have enunciated.

17 MR. McLEOD: Your Honor, I hate to do this, but I
18 really think we need to go through each one and get the
19 objection on the record. It won't take long.

20 THE COURT: I'm going to bifurcate. Are you going
21 to object to that?

22 MR. McLEOD: To the punitive damages phase? No,
23 your Honor.

24 THE COURT: Second one is voir dire. I'm not
25 going to allow direct voir dire examination.

1 MR. McLEOD: We --

2 THE COURT: Are you asking for direct voir dire
3 examination?

4 MR. McLEOD: Your Honor, we would like to submit a
5 few questions for the Court to ask.

6 THE COURT: That's not what we're talking about
7 here. We're just talking about whether you -- the
8 lawyers have finally given up on that because they
9 understand South Carolina doesn't do that except in
10 death penalty cases and then in a very limited way.

11 This is asking the lawyers be allowed to directly
12 voir dire the jury. I have always denied that, and
13 that's what this is about.

14 MR. McLEOD: Are you -- just so I'm clear, are you
15 looking at the submissions on Ms. McVey --

16 THE COURT: I'm looking at the plaintiff's
17 notebook here. That's what I started out.

18 MR. McLEOD: I don't have that in front of me.

19 MS. McVEY: Yancey, I can give it to you.

20 MR. McLEOD: This is our motion in limine.

21 THE COURT: I haven't gotten to yours yet.

22 MR. McLEOD: Yes, ma'am.

23 THE COURT: I haven't gotten to yours yet. I'm
24 starting with the plaintiff's. And if you will look at
25 number 11 on page 2, which is where we are now, voir

1 dire. See number 2?

2 MR. McLEOD: Yes, ma'am, I see it.

3 THE COURT: These were two defendants who wanted
4 to directly voir dire potential jurors. I deny that.

5 MR. McLEOD: I'm not -- yes, your Honor. I
6 understand. We didn't --

7 THE COURT: She's just going down. She goes down
8 all of them. Some she loves; some she doesn't love.
9 This one she doesn't love. Plaintiffs always want to
10 directly voir dire the jury.

11 MS. McVEY: That is true.

12 THE COURT: I don't allow it for the plaintiffs.
13 I don't allow it for the defendants.

14 MR. McLEOD: I don't believe we asked for that in
15 this case, Your Honor.

16 THE COURT: Three, knowledge of trade
17 organizations. I always allow that. Y'all don't like
18 it.

19 All right. So I deny any motions that seek to
20 preclude argument on the imputation of knowledge of a
21 trade association to a defendant. I always allow
22 information about what trade -- the positions that
23 trade associations took, as you know. And y'all always
24 object to that, and you can preserve your position on
25 that right now.

1 MR. McLEOD: Sure, over our objection,
2 particularly when there's no evidence that the trade
3 organization had anything to do with our company or we
4 had knowledge.

5 THE COURT: I understand all that.

6 MR. McLEOD: Thank you.

7 THE COURT: Setoff settlements, number 4. I
8 always deny any motions about setoff. I'd rather
9 handle those post-trial by enforcing the provisions of
10 the Contributions Among Joint Tortfeasors Act of South
11 Carolina. So I don't do any separate determination
12 before trial starts in that regard.

13 MR. McLEOD: Yes, your Honor.

14 THE COURT: And I don't think y'all have any
15 problem with that. I think everybody prefers to have
16 it done that way.

17 MR. McLEOD: I think our motion that we made
18 stands on its own.

19 THE COURT: To publish the pleadings. Of course,
20 I always deny defendants' motions to publish the
21 pleadings to the jury because I think it is a backdoor
22 way of violating the provisions of *Smith vs. Tiffany* by
23 naming parties who are no longer parties to the
24 litigation because they settled or were dismissed.

25 And you object to that, so it's over your

1 objection.

2 MR. McLEOD: We object to that. In this case,
3 your Honor, in particular, he had a separate claim in
4 1999 that we believe ought to be able to be commented
5 on.

6 THE COURT: Right. And I think we settled that
7 hash some time ago.

8 MR. McLEOD: Over our objection.

9 THE COURT: Over your objection.

10 Governmental regulatory agencies. This is to
11 preclude experts from testifying about what the EPA and
12 OSHA and all those governmental agencies have to say.
13 And I, of course, always allow that information to come
14 into evidence. So I deny any defense attempt to
15 preclude reference to governmental regulations.

16 Reptile and the Golden Rule. I always grant
17 defendant's motions to prevent any use of Golden Rule
18 or reptile arguments, anything of that nature.

19 MS. McVEY: Your Honor, I understand the Golden
20 Rule. And, of course, we're not going to do that, but
21 I think sometimes defendants think that reptile extends
22 to conversations and questions to the corporate
23 representative about safety, about protecting workers,
24 about that kind of thing. I think --

25 THE COURT: It doesn't extend to that. The

1 reptile theory is an attempt to get the jury to place
2 themselves in the footprint of the plaintiff in the
3 action and ask the juror to be afraid or take a
4 community collective action, things of that nature.
5 That's what the Golden Rule is about.

6 The Golden Rule is not about knowledge and
7 activity of a corporate defendant in the face of
8 knowledge about a known danger. It doesn't extend to
9 that kind of thing, but it -- the reptile is just a
10 synonym for Golden Rule, as far as I'm concerned.

11 And, of course, I grant all defense motions to
12 enforce the Golden Rule and not allow any reptile
13 arguments.

14 MR. McLEOD: Your Honor, and I think the question
15 about, you know, safety such --

16 THE COURT: Safety is a different issue.

17 MR. McLEOD: The end user, and maybe our
18 employees, but when they start doing it geared to the
19 general public, I think it gets into --

20 THE COURT: No, they're very well aware of that.
21 I haven't had plaintiffs do anything about saying
22 you've got to be the voice of the public and you've got
23 to ensure that you as the jury will protect the public.
24 That doesn't happen in our trials, and it won't happen
25 in this one.

1 Diseases other than mesothelioma.

2 Mr. Branham.

3 MR. BRANHAM: Judge, this is the issue of when
4 they knew about asbestosis and the harm it can cause
5 and how it relates to the knowledge of hazards of
6 asbestos throughout history and knowing about the
7 hazards of asbestos and that it can create the disease
8 asbestosis is certainly relevant in proving the
9 knowledge of the hazards of asbestosis.

10 THE COURT: Right. In the past, I have denied any
11 attempt by defense to preclude any reference to
12 knowledge issues with respect to asbestos-related
13 diseases and when the company might have been aware of
14 them. So it's over the defendants' objection, but we
15 have allowed questions along those lines in the past,
16 and it's primarily come up in the records of the
17 companies about such things.

18 Number 9, products not at issue. And this is --
19 the big thing there is the use of catalogs and other
20 kind of corporate documents to indicate what kind of
21 products they sold and whether those products included
22 the specification of asbestos-containing product. I
23 always deny defendants' motions in that regard.

24 MR. REID: Your Honor, if I may just observe, I
25 think all the rest are about motions in limine --

1 plaintiff's opposition to motions in limine filed by
2 other parties.

3 THE COURT: They all are, but they all relate to
4 things that are a potential issue here, which is the
5 reason plaintiff listed them.

6 MR. BRANHAM: The idea is just to streamline it
7 because it's usually the same stuff over and over.

8 MS. McVEY: If they want to go straight to their
9 motions, I'm happy to do that. This is just a way to
10 encompass all of them, but whatever they want to do,
11 your Honor, or whatever you want to do.

12 THE COURT: All right. Then we'll quit doing
13 that. They insisted on going through them one by one.
14 Now they don't want to do that.

15 All right. Let's go to number 12.

16 Theile, what is it?

17 MS. McVEY: I don't know what they want to argue
18 on their motions in limine. I thought we encompassed
19 them all, so maybe the thing to do -- Yancey, tell her
20 what you want to do.

21 THE COURT: Let's get to their notebook on their
22 motions in limine. I don't want to spend all afternoon
23 long.

24 MR. McLEOD: I'm trying to streamline it as well,
25 your Honor. We don't need a notebook to know what the

1 Court ruled previously.

2 THE COURT: Well, what I do need is some kind of a
3 motions notebook from you that details your defense
4 motions. I have one from John Crane. All I've got
5 from you on motions in limine is your omnibus, which we
6 have taken care of. We have dealt with that. We just
7 got finished doing that, haven't we, or have we?

8 MR. McLEOD: We were starting to go through our
9 motions in the omnibus.

10 THE COURT: Okay. Then let's just do that. I'm
11 looking on page 2 of our omnibus.

12 One, use of the term poison or similar references
13 in front of the jury, kill, poison, to murder. I grant
14 that, but I caution you that it is perfectly
15 permissible for the plaintiffs to say that the
16 defendant died because of asbestos contained in your
17 products. But pejorative-type terms, like poisoned or
18 killed or murdered, have not been used by plaintiff's
19 counsel before, and I'm sure will not be used this
20 time.

21 So grant that, but understanding that the leveling
22 of the accusation that your defendant caused the death
23 of plaintiff is -- they are permitted to do that.

24 MR. BRANHAM: Just so that I'm clear, I know about
25 kill and murder, and that's fine. I had not heard the

1 inclusion of poison before. I mean, it is a toxin.

2 THE COURT: What you're going to say is the
3 defendant died of mesothelioma, and he contracted that
4 while breathing asbestos-laden materials placed in
5 equipment that Crosby manufactured.

6 MR. BRANHAM: Sounds like a good way to put it.

7 THE COURT: That's what he's going to say, and
8 that's perfectly legitimate. That's what he claims.

9 MR. McLEOD: If he wants to say in closing
10 statement to the extent the evidence at trial --
11 there's evidence that this --

12 THE COURT: Well, they're certainly not going
13 to --

14 MR. McLEOD: I mean, whatever the evidence at
15 trial is, your Honor, and the term poison we believe
16 is --

17 THE COURT: We have tried these cases many times.
18 The evidence is going to be conflicting.

19 MR. McLEOD: We believe it's prejudicial to use
20 that term.

21 THE COURT: To use which term?

22 MR. McLEOD: Poisoned.

23 THE COURT: Mr. McLeod -- I'm sorry. I'm getting
24 a little testy too.

25 I granted your motion on poison, killed, murdered

1 and all of that. Your motion is granted.

2 MR. McLEOD: Thank you, your Honor.

3 THE COURT: The only thing that I have cautioned
4 you is that they will be permitted to draw the
5 connection between the death of the plaintiff and
6 exposure to asbestos materials that were used in
7 connection with your client's products. That, I think,
8 is completely legitimate and that is how they have
9 always phrased it, as I know from all the trials I have
10 had.

11 All right. Lack of insurance. Granted. You
12 can't refer to insurance.

13 Defendants' attorneys and amounts spent defending
14 this case. No reference to that. Granted.

15 Other cases involving counsel mentioning any other
16 cases where defendants or counsel may have been
17 involved. That's granted, but certainly material or in
18 the form of sworn statements, depositions, testimony
19 used in other cases when it is relevant can be brought
20 forward as evidence, and it will be referred to as a
21 sworn statement or a statement under oath and not be
22 referred to as testimony in another case.

23 MR. McLEOD: Thank you, your Honor.

24 I think this actually came up a good bit in the
25 Glenn trial where I feel like sometimes we're not

1 allowed to publish pleadings or talk about Mr. --
2 apparently Mr. Sizemore's previous asbestosis case, but
3 then when it comes to cross-examination of our
4 witnesses, they talk a lot about previous cases that we
5 have.

6 THE COURT: No, they -- I never allow them to do
7 that. They cannot refer to any sworn statements as
8 testimony in another case. And if they start doing
9 that, you need to get up and object, because that's
10 against my instructions. All you can do is impeach a
11 witness by saying: You gave a sworn statement to this
12 effect and, you know, use that sworn statement to
13 impeach. That can be done, but I will protect you on
14 that.

15 MR. McLEOD: Thank you, your Honor.

16 THE COURT: Lack of corporate representative
17 mentioning the presence or absence. That's granted.
18 We don't allow that.

19 Illnesses, mentioning the alleged exposure of
20 family members. This is not a bystander case, so
21 that's granted.

22 Probable testimony, mentioning the probable
23 testimony of a witness who is absent or unavailable.
24 If they're unavailable and they're not going to
25 testify, you can't mention their testimony.

1 MR. BRANHAM: Judge, if they have got an expert
2 who they tendered in the case and we deposed that
3 person and they don't call that expert, right, I would
4 intend to talk about what that expert -- here is what
5 that expert -- I might say in opening: Here is what
6 he's going to come in here any say, and then they
7 decide not to call them and I comment on the fact that
8 they didn't call the expert in closing.

9 THE COURT: They're going to do that at their
10 risk. They're going to tell you who they are going to
11 call, and if you refer to it in your opening statement
12 and then they don't call that person, you will be
13 permitted to cover yourself in that regard. I have
14 seen y'all talk about that's going to happen several
15 times, but it never has actually happened.

16 Personal beliefs of counsel. Granted. Can't do
17 that.

18 Improper or prejudicial comparisons, like the Erin
19 Brockovich, cigarettes, all that. Granted. Can't do
20 that.

21 Concert of action among defendants. I never have
22 understood that completely. But, normally, unless
23 there is some direct evidence of a conspiracy or
24 concert of action, I would grant that. Right now it's
25 y'all and y'all alone, so there would be nobody else

1 you would be talking about.

2 Inflammatory photographs or videotapes. They are
3 always going to be presented to counsel before they are
4 shown to the jury, so that's granted.

5 13, publishing evidence prior to the admission.
6 We don't do that. That's granted.

7 Religious or political beliefs. That's 14.
8 Granted. Don't refer to that.

9 15, any reference to wealth or power or corporate
10 size. That's granted. I always instruct the jury
11 everyone is on equal footing.

12 16, any references to statements or arguments that
13 the jury should send a message. We don't allow that.

14 MR. BRANHAM: Judge, go back one second on the
15 corporate size issue.

16 THE COURT: Yes, sir.

17 MR. BRANHAM: One of the things where that can get
18 touched on is if they had worldwide offices and they're
19 saying, I didn't know anything about the hazards of
20 asbestos.

21 THE COURT: I think that's fair.

22 MR. BRANHAM: I just didn't want to run afoul of
23 that.

24 THE COURT: You have at least one exhibit where
25 that's probably going to be discussed, and that goes to

1 knowledge because of all the places they were. But
2 that's not a reference that they should be -- that poor
3 little plaintiffs should be compared to the relative
4 size of the corporation.

5 All right. That's all the motions in the omnibus
6 motions.

7 Number 2 is causation requirements in South
8 Carolina. Exclude any testimony that there's no safe
9 level of exposure, each and every exposure. I deny
10 that routinely over your objection.

11 MR. McLEOD: Over our objection. We believe any
12 testimony, including as part of a total cumulative
13 dose, no matter how small that may be, is in direct
14 conflict with the Lorman standard that the plaintiffs
15 are allowed an exception to prove causation and over
16 our objection.

17 THE COURT: It's a battle of the experts, and
18 there is a good, strong body of experts that say that
19 it's a cumulative dose situation, that each and every
20 dose contributes to the overall situation. So I
21 understand your experts say no to that and theirs say
22 yes.

23 MR. McLEOD: Sure. And our argument is we
24 disagree with their experts, but it's a little
25 different than that.

1 THE COURT: Well, you say that that violates
2 Lorman, and they say -- I disagree and have before. I
3 think frequency, regularity and proximity can be shown
4 by experts who talk about this cumulative effect of the
5 doses. But there will be plenty of competing evidence
6 about how that works. I don't think you will be
7 disadvantaged there.

8 Motion in limine number 3, exclude simulations,
9 videos and photographs from Longo's firm. I will deny
10 that. I have limited Longo in the Johnson & Johnson
11 case, and y'all were probably here for that and know
12 that Dr. Longo now has a cleaner way of making his
13 projections about respirability because he's now using
14 samples that are more clearly in a chain of custody.

15 It doesn't have much impact on your case, though,
16 because these industrial exposure cases are a little
17 bit different in that regard, but I would not exclude
18 MAS because it's unreliable or misleading, or confusion
19 or junk science. I have dealt with that many times
20 before. Dr. Longo will be permitted to testify.

21 What he does that y'all don't like in this case is
22 not the below-the-waist stuff. He does the gaskets and
23 he shows how all this stuff flies in the air when you
24 use a vibrating brush or something else or putty knife
25 or whatnot to knock off the gasketing that is glued to

1 the flanges, and I would allow him to do that.

2 MR. McLEOD: I was actually thinking this might be
3 a moot point since they're not bringing Charlie Aye,
4 your Honor.

5 THE COURT: That's generally who comes up and does
6 that, so I don't know.

7 MR. BRANHAM: We may very well play the Longo
8 videos.

9 MR. McLEOD: As long as we're able to
10 cross-examine.

11 THE COURT: You will be able to cross-examine him.

12 MR. McLEOD: Over our objection still.

13 THE COURT: The arguments in the motion, of
14 course, are a little bit pejorative when you talk about
15 Dr. Longo and his associates being hired guns who
16 designed these tests and all that kind of stuff, but
17 we'll move on.

18 Number 4, Crosby Valves' motion to preclude
19 improper hypotheticals.

20 Yes, sir.

21 MR. McLEOD: Your Honor, this has always come up
22 in asbestos litigation, and this is actually a really
23 important one, and I would beg the Court's indulgence
24 just very briefly.

25 THE COURT: Yes, sir.

1 MR. McLEOD: Let me explain to the Court what that
2 is about.

3 THE COURT: Why certainly.

4 MR. McLEOD: As you know, we have just about been
5 talking about it all day, the Lorman standard is what
6 we have here. And you have heard our motion for
7 summary judgment. You know, regardless of what
8 plaintiff says from the bench, it's our position that
9 the evidence in this case, as we sit here today
10 pretrial at summary judgment stage, that there is no
11 evidence that Mr. Sizemore was exposed to a Crosby
12 valve.

13 Now, I'm not rearguing our summary judgment
14 motion, but here is the thing. We deposed these
15 experts, and typically the plaintiff's experts at the
16 time of the deposition don't really have -- aren't
17 prepared to offer testimony to case-specific
18 defendants.

19 And the way that the plaintiffs get around letting
20 us sort of know what their testimony is, is they
21 reserve the right to ask hypotheticals at trial, which
22 is -- I'm not suggesting that hypotheticals are not
23 proper, but it has the effect of preventing us from
24 knowing -- we don't know what the hypotheticals are
25 going to be. So all we can do is go back to the rules

1 and the law and say, okay, well, they're not allowed to
2 give an expert or ask an expert to make assumptions
3 based on facts that are not existing in the record,
4 okay.

5 And this is different from a normal auto
6 accident-type case. We have different causation
7 standards here. The Lorman standard says mere presence
8 to static asbestos is not exposure. I think the Court
9 mentioned that today with the asbestos paneling. It's
10 just not enough. It doesn't meet the Lorman standard.

11 So the fact that Crosby valves might have been in
12 some of the facilities where Mr. Sizemore worked is not
13 enough. That is just static asbestos, and it doesn't
14 establish exposure.

15 And so that be as it may, we understand the Court
16 denied our motion for summary judgment. But what's
17 going to happen at trial is because they don't have
18 evidence to meet that Lorman standard, what they do is
19 ask hypotheticals and ask their expert to assume
20 situations that do meet the Lorman standard.

21 Well, assume Crosby valves are in this facility
22 and assume Mr. Sizemore worked with and around them.
23 There's no evidence of that. Assume Mr. Sizemore did
24 this on a frequent and regular basis. Well, there's no
25 evidence of that. And then they get their expert to

1 say, oh, yes, that would have been enough to cause
2 Mr. Sizemore's disease.

3 And this motion is based on the fact that not only
4 is that not permitted by the rules because there's no
5 evidence, underlying evidence for those hypotheticals,
6 but it means that the expert's causation opinions are
7 inherently unreliable because they're not based on
8 facts and evidence. And this is how they attempt to
9 get around the Lorman standard.

10 So just for an example, if there was one record in
11 the case that one Crosby valve is right here, it's not
12 enough to meet the Lorman standard on a typical case.
13 But if they come in and generate facts through a
14 hypothetical that satisfies that Lorman standard and
15 allows their expert to testify, and to the jury it
16 sounds -- it's so prejudicial because here is an expert
17 doctor saying, oh, well, if he says it, it must be
18 true.

19 So there is an extreme possibility for prejudice
20 in this situation. And this motion is tailored --
21 we're not saying that they can't ask hypothetical
22 questions, but they must be based on the evidence
23 that's presented at trial.

24 And as we sit here today, there's no evidence that
25 Mr. Sizemore ever was exposed to any -- a Crosby valve,

1 much less an asbestos-containing one, because, quite
2 frankly, all these valves were. So, quite frankly, the
3 evidence is nonexistent.

4 I'm sure Mr. Branham is going to stand up and try
5 and connect some dots, and he talked about release
6 valves and those could have been Crosby's, but that's
7 not what the Lorman standard says. It says: Exposure
8 to a specific product on a regular basis in proximity
9 to where the defendant worked.

10 We don't have the evidence in this case of that,
11 and they should not be able to ask hypotheticals of
12 their experts. And if they do, the testimony should be
13 stricken if it's not based on the evidence.

14 MR. BRANHAM: Your Honor, if the motion is to
15 preclude me from asking a hypothetical that is not
16 based in the facts, I agree. We clearly disagree what
17 the facts are.

18 THE COURT: Yes, and that's just it. The biggest
19 thing that undergirds the arguments that Mr. McLeod is
20 making is the assumption that nothing but direct
21 evidence is real evidence of Crosby valves being in
22 these various plants.

23 Now, I've got to tell you, I have tried a bunch of
24 these asbestos cases now involving a discrete group of
25 locations in the State of South Carolina where miles

1 upon miles upon miles of piping and tubing and other
2 kinds of conduits for transmitting very high
3 temperature materials are contained. Crosby valves are
4 generally shown to be at these places by use of sales
5 records of Crosby or purchase order records of the
6 corporations. They are rarely shown by having direct
7 testimony from these folks who work there. They will
8 tell you a lot about valves and what they look like and
9 so forth, but only intermittently do they, in a 47-year
10 career like this man had, get down to the granular
11 ability to identify a specific piece of equipment at a
12 specific time. But those gaps are filled in, as is
13 permitted, by circumstantial evidence by connecting the
14 dots, that is, by showing purchase records, purchase
15 orders, sales records, the service personnel, the work
16 service personnel at particular sites and so forth.

17 So I certainly am not going to grant such a motion
18 as that. The hypotheticals are going to be proper if
19 they're based on properly admitted evidence, whether
20 that evidence is direct evidence or circumstantial
21 evidence. And the rules of South Carolina say that
22 direct evidence and circumstantial evidence are to be
23 given the very same weight. That's what the cases say,
24 whether they're in the criminal context or civil
25 context. So I would deny the motion.

1 MR. McLEOD: Real quick, your Honor. I think --
2 just real quick, real quick. I just want to make the
3 point that Lorman itself, including numerous, numerous,
4 numerous cases all over the country, granted summary
5 judgment based on the fact that they're only records of
6 the products existing in the facility, no testimony of
7 actual exposure to those products. That's one thing.
8 And I think that the Court is just a little bit -- I'm
9 not suggesting --

10 THE COURT: This is more than just the presence of
11 stuff. This is evidence of how these workers worked,
12 of how they deal with this equipment, of how they
13 service these records. I mean, we don't need to plow
14 this kind of ground. This is the battle of being able
15 to convince a jury, Mr. McLeod. But this is not
16 something where all you've got is a couple purchase
17 records. I used that as an example.

18 But before these cases are finished, there is a
19 good deal of evidence about how these men worked, what
20 kind of things they worked on, what kind of things they
21 were present next to when they were being worked on.
22 And in many cases, there are valves and pumps and the
23 kinds of things that your clients made and sold to the
24 facilities involved.

25 So I am not going to make some overall precluding

1 ruling. These cases are always a combination of direct
2 and circumstantial evidence coming from many different
3 directions. At the end, before the case is submitted
4 to the jury, and at the end of the plaintiff's case
5 before defendant even has to put up a case, I make
6 evaluations as to whether that evidence is sufficient
7 to move to the next stage.

8 This is very premature, in my view, to ask for
9 some overall conclusive thing because it's a
10 combination of a lot of different kinds of evidence.
11 And I now have the experience of having heard many of
12 these cases, and I think -- and I have at times granted
13 judgments at the end of the presentation of the
14 plaintiff's case because they did not connect a
15 particular defendant. I have let that defendant out.
16 I have granted a few motions for summary judgment where
17 there was absolutely no product identification.

18 But this case is not that case, in my view, so I
19 deny it.

20 MR. McLEOD: Thank you, your Honor.

21 THE COURT: All right. What else have we got? I
22 think that's the end of the defendants' motions in
23 limine.

24 MR. REID: Your Honor, I think everything left
25 falls under the umbrella of scheduling.

1 MR. BRANHAM: Do we need to talk about your
2 corporate rep or is the moving of the trial date going
3 to solve that problem?

4 THE COURT: Let's talk about the trial date.
5 That's the most practical thing we need to talk about.

6 MR. REID: Agreed.

7 THE COURT: Y'all sat very patiently through all
8 of Johnson & Johnson, and it looks at the present time
9 as if Johnson & Johnson will go.

10 I pushed the scheduling of Sizemore because the
11 thing had been removed, and I just didn't know whether
12 Judge Seymour, who is not in this country -- she is on
13 a trip overseas and will not be back until several
14 weeks from now. And I just didn't know whether she
15 would have the opportunity to rule on these removal
16 matters. But as it develops, she did have the
17 opportunity to rule, and ruled at the end of last week.

18 So all of these asbestos cases, four of them that
19 have been removed, have now been sent back to the
20 appropriate circuit courts.

21 So it looks to me as if J&J's case is going to try
22 beginning the 13th.

23 I can do one of two things. I really feel for
24 y'all because I jerked you around a bunch, and I did it
25 in the hopes that I could get things to the point where

1 we would settle, everybody would settle, and I have
2 achieved that to some extent because there are just two
3 of you left in the case at the moment, Crosby and Waste
4 Management.

5 I wish there was some way that y'all could come
6 together and compose the remaining cases. It would
7 have been easy if I had just granted the defendants'
8 motion for summary judgment, and it would be over on a
9 very thin scintilla of evidence. I have let the cases
10 go forward, as I normally do.

11 But y'all need to know something. And we can
12 either try to skate around a little bit, hope we get --
13 J&J gets to the brink and then settles, or we can just
14 go on now and put everybody out of their misery and
15 tell Mylinda Nettles to let the jury go and Sizemore is
16 off.

17 What should we do?

18 MS. McVEY: Our preference is to give it some time
19 to see what J&J does because Sizemore is ready to go.

20 THE COURT: It is. That's the sad part about it
21 is y'all have worked so hard and done such a good job
22 of getting everything to me, including your pretrial
23 briefs and voir dire questions and all that. So it is
24 absolutely ready to go.

25 MR. REID: Couple things, your Honor.

1 THE COURT: Yes, sir.

2 Give me some wisdom here, Mr. Reid. I don't know
3 what to do.

4 MR. REID: Your Honor, I'm afraid I'm short on
5 that this afternoon.

6 Overall, I think I'd like to have the Court put us
7 off.

8 THE COURT: That's a very legitimate request. I
9 understand that.

10 MR. REID: In part because --

11 THE COURT: You've got to line up experts and pay
12 them and make reservations and do all that kind of
13 thing.

14 MR. REID: And I have taken the time since the
15 Court informed us by e-mail on Friday about the
16 possibility of the movement of the trial to the 20th.
17 I'm going to have some expert difficulties that
18 effectively would have me putting on my case if there's
19 time available before the plaintiffs go.

20 THE COURT: And that's problematic too.

21 MR. REID: That leaves me without knowing what I'm
22 responding to when I go second. So we respectfully
23 request that. And I recognize the Court may want to
24 have some time go by, so I guess I would say this: My
25 preference would be to tell us this afternoon, but if

1 you could otherwise pick a date like noon Friday or
2 something like that. I don't know what the prospects
3 are for this talc case. I don't get involved with
4 those kind of cases. All I know about it is what I
5 heard this morning.

6 THE COURT: Well, you sat in the same -- you
7 listened to the same thing I listened to, and it didn't
8 sound to me like there was much settlement talk going
9 on.

10 MS. McVEY: I understand it puts all -- part of
11 the good news with having a block is it puts pressure
12 on both sides, right? And so we, of course, have to
13 pay our experts and line them up just like they do and
14 get ready to go.

15 The concern is that because Crosby's position
16 typically in resolving these cases is they don't
17 resolve, is that we're going to be right back here with
18 Crosby no matter what. And so we would prefer to keep
19 marching forward. And if we don't go and J&J goes,
20 then we don't go.

21 THE COURT: Here is the other thing that I have to
22 take into account as well. Hampton is a small county,
23 and I feel keenly the responsibility I have to Mylinda
24 Nettles, the clerk of court there. If the overwhelming
25 possibility is this case will not be tried, we owe it

1 to her to tell her that, and that's what's also driving
2 my concern.

3 MS. McVEY: I understand. I just -- I hate to be
4 this ready and not be given the opportunity to go, but
5 I understand.

6 MR. BRANHAM: Judge, I agree with everything that
7 she said. But, you know, there has been some recent
8 history around the country of J&J resolving these
9 cases.

10 Now, I sat there and listened to what you listened
11 to this morning too, and I agree with you. It sounds
12 like they're going to try that case. But given the
13 posture nationwide of these nationwide removals and how
14 much it's apparent that we're involved in a lot of
15 that, that that's putting a ton of stress on J&J
16 counsel because they can't get it removed fast enough.
17 They're still removing cases. They didn't remove them
18 all at once. So I have no idea or no inside
19 information about how that's playing out nationwide,
20 but I do think the J&J cases are in a little bit
21 different posture than they have been.

22 And, again, who knows. I heard the same thing you
23 did. But even a couple of days, I think, waiting to
24 see makes some sense.

25 THE COURT: Mr. Reid, anything further?

1 MR. REID: I can't tell you anything you don't
2 already know about the prospects of that case settling
3 or what difficulties Hampton County may have by keeping
4 it there, so I will not comment further on that.

5 To be honest, I think I'm duty bound, because of
6 our expert difficulties, of formally moving for a
7 postponement of the trial date.

8 THE COURT: I understand. I consider what you
9 said as a formal motion in that regard, and I'll regard
10 it as such.

11 MR. REID: Thank you.

12 THE COURT: But I'm going to continue the case not
13 just because of that, Mr. Reid, and that's not said
14 with disrespect.

15 MR. REID: Understood.

16 THE COURT: But that wouldn't alone drive me.
17 What's driving me is responsibility I feel to the clerk
18 in a small county and to our court administration to
19 have some certainty about what's going to go on.

20 So I will continue the Sizemore case.

21 MS. McVEY: Thank you, your Honor. We would ask,
22 because Hampton County is such a small county, it would
23 be beneficial, I think, to go ahead and get another
24 trial date from Hampton County when we can try this
25 case again.

1 THE COURT: I'll do some investigation on that,
2 and I think I can get probably a fairly quick date. Of
3 course, I have got to look at these other cases I have
4 blocked for the summertime, but let me explore that
5 with Mylinda and with court administration, and I'll
6 get back to you promptly on that with some suggested
7 dates, and then y'all can look at them and see how that
8 might dovetail or not dovetail with schedules for both
9 plaintiff's counsel and defense counsel. So I will be
10 mindful for the need for us to work on that together.

11 MS. MCVEY: Thank you, your Honor.

12 The last thing before Mr. Reid and Mr. McLeod go
13 is we do want to schedule --

14 THE COURT: Glenn.

15 (Off-the-record discussion about scheduling.)

16 THE COURT: Let me try for something. What would
17 the 10th or 11th be like for you all, Theile and Trey?

18 MS. McVEY: I can do -- the 10th is better, if
19 that suits, but I can make the 11th work.

20 THE COURT: I'm going to write June the 10th down
21 here. It's going to take doing a little bit of calling
22 around to see if that will work.

23 Trey.

24 MS. McVEY: He's okay.

25 MR. BRANHAM: Yes, your Honor.

1 THE COURT: I'm going to try for the 10th.
2 Tentatively put that in your calendars, and then I'll
3 get back to you, or Walker will, on that. Okay?

4 Get my brain back together again. I've got Glenn
5 stuff thrown all about every which way, so how about
6 each side try to get me up an agenda on what we need to
7 do on Glenn.

8 MS. McVEY: I will e-mail everybody.

9 THE COURT: So y'all kind of get together on that,
10 and we'll tentatively say the 10th is going to be it.

11 All right. We have got one more little round of
12 stuff here, which is Hopper.

13 THE COURT: What I have on Hopper is this is
14 plaintiff's motion for an expedited trial.

15 MS. McVEY: Yes, ma'am. Your Honor, I think this
16 is just a formality, but as you know, under our
17 statute, plaintiffs who have been diagnosed with
18 mesothelioma can move for an expedited trial basis.
19 The statute says 120 days from the date you grant the
20 motion. We're actually seeking to put Hopper on the
21 November block, the November 2019 block in this case.

22 Your Honor, the Hopper case is in pretty good
23 shape. He was diagnosed with mesothelioma in October
24 of 2018. We have answered discovery for the
25 defendants. We have given the releases to get any

1 other records they want. We have answered, of course,
2 their request to produce interrogatories. Mr. Hopper
3 has been deposed.

4 Your Honor, since he was diagnosed in October of
5 2018 asking for a November trial date, it's pushing
6 things for Mr. Hopper, and he would like to live to see
7 his trial date. So we would ask for an order granting
8 the motion for expedited trial and for you to schedule
9 it for the November block.

10 THE COURT: And his deposition is now complete?

11 MS. McVEY: Yes, ma'am.

12 THE COURT: All right. How many defendants are
13 there in the case?

14 MS. McVEY: There are a lot. I mean, there are a
15 lot.

16 MR. MERIWETHER: I have a list which I can read,
17 but you would get tired.

18 THE COURT: Robert, just roughly tell.

19 MR. MERIWETHER: At least 60.

20 MR. BRANHAM: Agreed.

21 MR. MERIWETHER: Rather a lot, really.

22 THE COURT: And the case is?

23 MS. McVEY: Richland County case.

24 THE COURT: A Richland County case.

25 Ms. McVey, anything else?

1 MS. McVEY: No, ma'am.

2 THE COURT: Ms. Techman is here.

3 Ms. Techman, who do you represent?

4 MS. TECHMAN: Good afternoon, your Honor. I have
5 quite a few of the 60-plus defendants. Jennifer
6 Techman.

7 We filed a response to the motion. I don't know
8 if the Court has it. It's filed on behalf of CVS
9 Corporation, Foster Wheeler Energy Corporation, General
10 Electric Company, Hobart Brothers, Ingersoll Rand,
11 Spirax-Sarco, the Lincoln Electric Company and Trane.
12 And now that I have read that, if your Honor would like
13 it, I can hand this copy up.

14 THE COURT: That would be great. Thank you so
15 much.

16 MS. TECHMAN: Appreciate you letting me use it.

17 Your Honor, you touched on my clients' concerns.
18 We certainly understand that Mr. Hopper would like to
19 have his day in court. The defendants simply are
20 concerned that we have sufficient time to fully
21 investigate the case.

22 There are a lot of parties in the matter. There
23 are multiple states at issue. There are, I believe,
24 more than 20 work sites at issue. Much of the
25 discovery is out of the control of the defendants. A

1 lot of the records are in the hands of third parties.
2 We don't have the ability to make those folks move any
3 faster than they move.

4 So our request is simply that the Court hold the
5 plaintiff's motion in abeyance because at this point my
6 clients contend that we can't make a good-faith finding
7 that the defendants would not be prejudiced by an
8 expedited trial.

9 THE COURT: How many of these job sites are in
10 South Carolina?

11 MR. BRANHAM: A lot.

12 THE COURT: A bunch?

13 MR. MERIWETHER: Your Honor, I can speak briefly
14 to that. I had taken a quick check in my materials.
15 By the way, I did a thumbnail count as well. I got 66.
16 I can be off by one.

17 For the work history which we could deduce for
18 Mr. Hopper from his complaint, his answers to
19 interrogatories and his deposition testimony, I've got
20 from 1963 to 1969 as a Navy seaman, and eventually he
21 was in the first group of the SEALs.

22 MS. McVEY: Your Honor, we disclaim the Navy
23 exposure, just as an aside.

24 MR. MERIWETHER: That will make life easier. I've
25 got '64 to 2004 during which he's in industrial job

1 sites in South Carolina, North Carolina, Georgia,
2 Alabama, Georgia and the Gulf of Mexico. I've got him
3 specifically in Lancaster, South Carolina at Clark
4 Controls, at the Westinghouse turbine plant up in
5 Charlotte, Duke Energy at various sites in South
6 Carolina and North Carolina. Got him at some of the
7 places with which you are familiar, such as Bowater and
8 the Dupont May plant right outside of Camden. But I've
9 also got him in some places that you probably haven't
10 run across before, but the Wansley power plant down in
11 Carrollton, Georgia, Mitsubishi up in Chesapeake,
12 Virginia. We've got the Eastover International Paper
13 Mill here in Columbia. We have got -- outside of
14 Columbia anyway. We have got Childersburg Alabama
15 Paper Mill down there.

16 MS. McVEY: Your Honor, we agree there is a lot of
17 work sites.

18 MR. MERIWETHER: I'm just saying we have got a
19 bunch, and it is a bunch of states. So I think it's
20 easier just to say South Carolina, Georgia, North
21 Carolina, Virginia, Alabama. I don't think we have got
22 Tennessee, but I could have missed it.

23 MS. McVEY: Your Honor, just in brief response to
24 that, this is not dissimilar to lots of cases you had
25 before you, of course. The Hill case, the Sizemore

1 case, they're complex cases, we agree. The statute in
2 South Carolina contemplates this and says, and you know
3 this, without a trial date, nothing happens. Right?

4 So they certainly could move for a continuance if
5 they feel like they aren't ready by the time the trial
6 date pops around, but he's a fellow with mesothelioma
7 who is very sick, and we want to get him a trial date.

8 THE COURT: What have we got scheduled past July?

9 MS. McVEY: So we're scheduled, I think, for July,
10 September. There is a November block that was open.
11 The only thing that's been moved to the November block
12 is the Sam Nicholas case.

13 MR. MERIWETHER: Which I think is a living meso
14 from our good friend --

15 MS. McVEY: It's my case, yes. It is currently
16 removed, like some of the other --

17 THE COURT: Is that the one Hendricks has?

18 MS. McVEY: No. No, ma'am. That's Covil. It has
19 still got Judge Seymour. I expect it will be remanded,
20 but it hasn't been yet.

21 THE COURT: So at the present time, really,
22 November has overflowed, but it has --

23 MS. McVEY: Sam Nicholas. We would ask Hopper to
24 go in that block.

25 MR. MERIWETHER: Would it go -- is Sam Nicholas

1 still living?

2 MS. McVEY: Yes.

3 THE COURT: So Hopper would go behind that?

4 MS. McVEY: Yes.

5 THE COURT: Okay. I will grant the motion.

6 MS. TWILLEY: Excuse me, your Honor. Allyson
7 Twilley on behalf of Shell Oil Company. I have one
8 other ground.

9 THE COURT: Come on up here. I don't want to jump
10 the gun if you have got something you want to say.

11 Come right on up and go ahead with your full name
12 for the court reporter.

13 MS. TWILLEY: Allyson Twilley for Shell Oil
14 Company.

15 Your Honor, we object to the motion to expedite
16 because the requirements of the Asbestos Act have not
17 been satisfied, specifically the requirement of the
18 report that has to be served.

19 The report that was served in this case, it
20 doesn't meet all the requirements of the act.

21 THE COURT: Well, specifically in what way is it
22 delinquent? I mean, are we talking about some
23 nitpicking things or some really important things?

24 MS. TWILLEY: Well, there are some specifications
25 that are in the statute as to what the report must

1 contain before a case can be put on an active trial
2 docket or expedited, for that matter.

3 So the report has to contain a diagnosis of
4 mesothelioma. And the one that the plaintiffs have
5 filed does state that. However, the report also has to
6 conclude to a reasonable degree of medical certainty
7 that exposure to asbestos was a proximate cause of the
8 diagnosis of mesothelioma.

9 And the report that was attached as Exhibit A to
10 the plaintiff's motion does not contain a conclusion,
11 anything to that effect.

12 THE COURT: This is a medical report that says he
13 has mesothelioma, but it doesn't say to a reasonable
14 degree of medical certainty? I'm sure we can repair
15 that rather quickly.

16 MS. TWILLEY: It doesn't address asbestos or
17 anything like that. It's just a pathology report. And
18 there's one other requirement that the report must
19 contain under Section 44-135.

20 THE COURT: It has a diagnosis of mesothelioma,
21 but it doesn't have this other little conclusion which
22 is?

23 MS. TWILLEY: There's two. There's one additional
24 one that the report must contain a conclusion that the
25 exposed person's medical findings were not more

1 probably the result of other causes revealed by the
2 exposed person's employment in that industry.

3 The report we have been provided does not contain
4 that, so that's the ground of our objection.

5 THE COURT: Very good. Well, mesothelioma, at
6 least in the industrial setting, is pretty much a
7 signature cancer, so I don't think that's going to be
8 disqualifying. I would overrule that objection.

9 Anything else?

10 MS. TWILLEY: We just wanted to put our objection
11 on the record that it's a requirement of the Act.

12 THE COURT: I understand that completely. That's
13 what Ms. Techman wants to do as well, and she's got a
14 bunch of clients and you have got an important client
15 and you need to be protected in that regard. I have no
16 dilemmas with that at all, and you are protected.

17 I will set it as the second case in the November
18 block.

19 MS. McVEY: Thank you, your Honor. I will submit
20 an order to you.

21 THE COURT: Exactly, detailing that.

22 Now, what else have we got?

23 MS. McVEY: Your Honor, there are a couple of -- I
24 think there's some that are easier than others. The
25 next one I think would be we have a motion to amend the

1 Hopper complaint to add two defendants.

2 THE COURT: Which defendants?

3 MS. McVEY: Armstrong, it's a steam trap company,
4 and Southern Insulation. And this just came out in
5 discovery. I circulated the amended complaint to all
6 the defendants. There were no true objections. Danny
7 White objected that he didn't have time to look at the
8 complaint, and Ms. Twilley just said he is withdrawing
9 that. And Kirk Morgan, who represents Ford Motor
10 Company, also couldn't consent.

11 MALE SPEAKER: We'll withdraw that objection.

12 THE COURT: Good. Bring that up here. I'll sign
13 it.

14 MS. McVEY: Thank you, your Honor.

15 Your Honor, just one final administrative motion.
16 Southern Insulation is a little bit like Covil and Star
17 Davis. They're defunct companies. The only assets
18 that we're even aware of are insurance proceeds. We'd
19 like to move to appoint a receiver, Protopappas.

20 THE COURT: I will do that.

21 MS. McVEY: Thank you, your Honor.

22 THE COURT: And you have got destructive testing?

23 MS. McVEY: Yes, ma'am. I'll let Mr. Branham
24 argue that.

25 MR. BRANHAM: Trey Branham for the plaintiffs.

1 Just to reorient you, we acquired from Lincoln
2 Electric Company in the Taylor case after argument a
3 couple of welding rods that they created. And we had
4 this discussion about Mr. Longo being involved in the
5 creation of the rods.

6 THE COURT: I know.

7 MR. BRANHAM: What the Court ruled was that if we
8 got the rods and a little bit of the flux, which is the
9 coating of the rods that has asbestos in it, is if we
10 wanted to conduct destructive testing on those rods, I
11 either needed the consent of Lincoln or I needed to
12 come back to talk to you. So here I am.

13 Here is the disagreement that we're having. What
14 Lincoln wants to know before they will even talk about
15 consenting is who am I sending it to, who is my
16 consulting expert, what is the test that my consulting
17 expert is going to do, and what are the results that my
18 consulting expert obtains.

19 Now, we have a consulting expert rule for a
20 reason, which is so that I can fully and fairly
21 investigate my claim. And ordering me to violate and
22 disclose the consulting expert privilege before I even
23 know what the results are is patently unfair, and there
24 is a reason for that, right? There is a reason they
25 don't want to tell me what Dr. Longo figured out or

1 what tests they have done, right, because it's
2 consulting expert. I understand that.

3 And so their arguments about why they should do
4 that fail. And let me explain to you.

5 Their first argument is that I'm forcing them into
6 a forced spoliation situation, right? I'm going to
7 destroy some of the rods. They have a limited number
8 of rods, therefore, they're going to be in a situation
9 of spoliation. Untrue. They have got court orders
10 ordering them to turn over the rods. You can't have
11 spoliation if the Court has ordered you to do
12 something.

13 Two, they made these rods. These aren't rods that
14 they made during the course of business when they were
15 making asbestos-containing rods. They made these after
16 that, after they had stopped doing that. If they run
17 out of rods and they think they need some more, they
18 know how to make them. I don't have that luxury. And
19 so there is no forced spoliation, your Honor.

20 The need to do this is really clear. Every expert
21 that has tested their rods comes back with results, and
22 then the way they attack these results are several
23 ways, which is the rods are old, they're contaminated,
24 we don't know where they were, must have been somebody
25 sprinkling asbestos on them, you didn't decontaminate

1 the rods. They go at the origin of the rods.

2 And it's funny because they're already doing this
3 here despite Dr. Longo's sworn testimony under oath
4 that he was there for the creation of the rods, which
5 their corporate representative was not, and that the
6 rods were created to be exactly the same kind of rods
7 that they made back in the day.

8 They lead in their response with: These are not
9 the same kind of rods. These are different, special,
10 designed specifically for a different kind of test. So
11 they're already going at these to attack them
12 apparently fearful of what they might reveal.

13 And so we ought to be able to do the destructive
14 testing. They haven't given me all the rods. They
15 gave me a few. They still have some left. They
16 presumably didn't give me all the flux, the coating on
17 the rods. They have some left. So it's not that I'm
18 going to be able to do a test that they can't do.

19 And this is the type of issue that goes straight
20 to the heart of the Hopper case and lots of other cases
21 like it. Their argument in these cases is that these
22 rods cannot under any circumstances release fibers.
23 That's their argument. Never. Not any.

24 So let's test their rods that they made and then
25 we can argue about whether that evidence comes in or

1 not, but I shouldn't have to disclose who I'm sending
2 it to or what I'm doing with it or anything else.
3 That's consulting expert privilege. I am entitled to
4 investigate my case without opening it to the world.
5 Just like they have done, creating these rods,
6 apparently having some of them tested, not disclosing
7 the results. And I haven't gone looking for that. Or
8 when I did, I stopped.

9 But if the Court's going to order me to disclose
10 the protocol that my consulting expert is going to use
11 and the results of whatever it is that he or she does,
12 then they should have to do the same thing. Any tests
13 that they have done, any information that they have
14 gleaned from testing their own rods, it's what's good
15 for the goose is good for the gander.

16 I don't think they should have to do that. But if
17 I'm going to have to do it, I'm in an unfair position,
18 they should have to do it too. So that's where we are,
19 and what I'd ask you to do is allow me to do the
20 testing.

21 THE COURT: All right. Ms. Techman.

22 MS. TECHMAN: Jennifer Techman for Lincoln
23 Electric and Hobart Brothers.

24 Your Honor, I'll start with Mr. Branham's last
25 point, what's good for the goose is good for the

1 gander.

2 Just to remind the Court, when we were last here
3 on plaintiff's motion to compel production of these
4 experimental welding rods that were made in the lab,
5 plaintiff contended that they were entitled to get all
6 the details notwithstanding my client's assertion of
7 consulting expert privilege. The Court has heard that
8 matter in detail, and I won't reargue those points
9 here.

10 But if we're going to apply the goose and gander
11 rule, I would say we're at the gander point of that
12 rule. You have already ruled that they were entitled
13 to the details with regard to Lincoln's consulting
14 expert, Dr. Longo. The gander portion of that means
15 that, as you ruled, we should get to know who is going
16 to test these experimental rods and what they're going
17 to do with them.

18 And, in fact, your Honor, I think that you have
19 already ruled on that. Page 67 of the transcript from
20 the proceeding on the motion to compel, you state: I
21 would ask that your Honor please require that in
22 order -- in your order that Lincoln get 72 hours'
23 notice of any destructive testing. And this was your
24 statement following: THE COURT: He doesn't have any
25 trouble with that. He is very much going to engage in

1 a protocol where you are notified before any testing is
2 done.

3 And I think that is the point where we are. They
4 wanted tests. They haven't done anything yet, but
5 they're here to discuss that. And you get the chance
6 to know who is going to do the testing and why they
7 are doing it in connection with that, so forth. I
8 think that is reasonable, and I will certainly do that.

9 Your Honor, I have attached the excerpt from the
10 proceedings to the response of Lincoln and Hobart to
11 plaintiff's motion for destructive testing. But I also
12 would like to make very clear so that the Court is not
13 later surprised by this, a very important point.

14 Lincoln, and there are only Lincoln rods at issue.
15 I believe the motion was styled as destructive testing
16 with regard to Lincoln and Hobart, but the only issue
17 is with regards to Lincoln.

18 Lincoln's position is testing of these rods is
19 irrelevant. These are experimental, lab-made rods that
20 are now nearly 30 years old. They are not
21 representative or materially the same as the rod used
22 by Mr. Taylor. We would be comparing apples and
23 oranges. So I want to make sure that the Court is
24 aware, Rule 401, threshold question, these are not
25 relevant on the issue of was Mr. Hopper exposed from

1 handling these experimental lab-made rods. He never
2 handled them, and they wouldn't be representative of
3 what he did handle.

4 THE COURT: What about Longo? Longo says they're
5 made to be exactly what he did handle.

6 MS. TECHMAN: I believe that Longo said that he
7 watched the rods be made to assure himself that they
8 complied with the formula for the litigation at the
9 time, which was what was commonly called fume testing.
10 The theory being as the rod is burned, does the fume
11 expose someone?

12 That is not the claim in Mr. Hopper's case. That
13 is not the claim in welding rod litigation in asbestos
14 anywhere in the country.

15 THE COURT: Well, why would you make them -- you
16 made them. Why would you make them if you weren't
17 going to make them to be just like the ones that you
18 used that Hopper would have used? What would have been
19 the point of making them something different from the
20 ones that are now being alleged to be defective?

21 MS. TECHMAN: I'm very glad you asked because
22 that's the heart of the matter. They were made for the
23 litigation as it was asserted three decades ago, and
24 that was fume litigation.

25 Mr. Hopper, I believe plaintiff's will claim,

1 could have had potential exposure from handling the
2 rods, not from handling it and breathing the fumes.
3 That's not the claim in this case. Instead they may
4 say rods are on the floor and got stepped on --

5 THE COURT: That doesn't make any sense to me. I
6 don't care what kind of exposure. I'm asking the more
7 fundamental question: Why would you have made the rods
8 to be any different from the rods that were in
9 existence at the time? What would have been the point
10 of that?

11 MS. TECHMAN: The rods were made to address the
12 claim in fume litigation, your Honor. Which is not the
13 claim at issue in this lit -- I simply -- I understand
14 your frustration and you may be unsatisfied with my
15 explanation. I want the Court not to be surprised
16 later if there is some testing of these experimental
17 rods, I don't want the Court to feel like we were not
18 candid.

19 I want you to know that it will be Lincoln's
20 position that the results of any of that testing is
21 wholly irrelevant and also unnecessary, your Honor,
22 because plaintiffs have testing from someone named
23 Laurie Todd. They have testing done on actual
24 production rods by a gentleman named Schuster.

25 And also you may recall the last time we were

1 here, we talked about how this is not the first request
2 for the experimental rods. This is, to my knowledge,
3 at least the third request. At least two times prior
4 to this courts determined that the rods were protected
5 by privilege, that there were exceptional
6 circumstances -- let me make my point, please. I'll
7 get to it.

8 THE COURT: Yes, ma'am.

9 MS. TECHMAN: Twice five rods were given to
10 different plaintiffs' firms in asbestos litigation. We
11 never saw the material again. No test was done, or
12 that test was and it was fantastic for the welding
13 defendant.

14 I don't know if Mr. Branham has spoken with the
15 other members of the plaintiffs' asbestos bar who have
16 already been through this very exercise.

17 With regard to spoliation, Lincoln's concern is
18 that if we keep giving five, five, five, eventually, of
19 course, there will be none and we will be -- we will
20 have a motion to compel, and our response will be: We
21 have nothing to give you.

22 THE COURT: Mr. Branham makes the contention that
23 you know exactly how these things are made, and if you
24 need to make some more, you can do that.

25 MS. TECHMAN: Does that leapfrog over the issue of

1 why we need to manufacture rods --

2 THE COURT: Don't ask me a question. Answer that
3 question first. Mr. Branham contends that you can --
4 that your company, if they run out of these -- you call
5 them experimental, Longo calls them very same as the
6 ones that Hopper handled -- but whatever it is,
7 Mr. Branham asserts that y'all have exact information
8 about the experimental rods quote/unquote and how they
9 are made and that you can duplicate them. Is that so?

10 MS. TECHMAN: I think I understand the Court's
11 question: Could Lincoln remanufacture a production
12 rod, not an experimental rod?

13 THE COURT: No. My question is we have got some
14 rods that they say are the same. You call them
15 experimental. They call them the same as the
16 production rods. Presumably you have some information
17 within Lincoln as to how the production rods were made,
18 and if there's some difference, how these rods were
19 made and have the ability to remake these. That's what
20 I'm asking. Can't you do that?

21 MS. TECHMAN: I don't know, Judge. But I don't
22 even know if we even have to reach that question
23 respectfully --

24 THE COURT: I'm asking because I need to know
25 because of the other arguments you're making. So I'm

1 asking you one more time: Can't you remake these rods?

2 MS. TECHMAN: Could Lincoln remanufacture
3 production rods of the type that Mr. Hopper used?

4 THE COURT: Ms. Techman, don't rephrase my
5 question one more time. I am asking. They are in
6 existence now. Some rods you still have and some you
7 have turned over to the plaintiff pursuant to my order.

8 MS. TECHMAN: Correct.

9 THE COURT: And if you run out of the ones you
10 have turned over to plaintiff, you have got some more
11 left, but if you run out of them, can you remake some
12 that are just like these?

13 MS. TECHMAN: I don't know, Judge, is the most
14 candid answer I could give the Court. I don't know.
15 Could they follow the same formula? It seems logical
16 to me. But would they remanufacture the experimental
17 rod that was representative for testing in the fume
18 litigation, I don't know why they would because that's
19 not the nature of the claim anymore because the science
20 has shown that that's not a viable --

21 THE COURT: It doesn't make any sense to me that
22 you would have made it any different from the one that
23 Hopper handled. This idea of it's a fume claim and
24 therefore we made it different because of that, that
25 doesn't make any sense to me.

1 What makes sense to me is that you would remake a
2 rod that was like the one he handled so it could be
3 tested. And it wouldn't matter what kind of claim he
4 was making. The beginning point of any kind of testing
5 would be to remake one that's like the one he handled,
6 whatever his claim is about, what the thing did or did
7 not do.

8 MS. TECHMAN: I think my assumption is that
9 30 years ago, if the company was trying to make a
10 mock-up of a product to assess something, they would
11 have built that mock-up based on the nature of the
12 claim at the time. And we have come 30 years from
13 that. The claim is different.

14 THE COURT: I think I understand your argument.

15 Now, have you turned over to them any testing you
16 have done including the name of the tester, the
17 protocol engaged in and the result of the testing?

18 MS. TECHMAN: I believe plaintiffs' bar does have
19 testing by Laurie Todd and by Schuster.

20 Correct?

21 MR. BRANHAM: Judge, I think we're confused. What
22 I'm talking about is who they hired to do their
23 internal testing for rods that they have not produced.
24 There are plaintiffs' experts that have tested some
25 rods that were found elsewhere. We talked about that.

1 But my point in what she said, which is incorrect,
2 is that I asked and was given their consulting expert
3 information. That's not correct. All I got -- the
4 initial motion said I want it all. Right? And then I
5 filed an amended motion to say all I want are the rods
6 and the flux. And, actually, the asbestos sample which
7 they say they're now out of. But I got two of the
8 three based on your order. But that's all I've gotten.
9 I have gotten the rods and the flux. I have gotten no
10 internal information of what Lincoln's test results
11 from its consulting experts are, which is exactly what
12 she's asking of me.

13 THE COURT: All right.

14 Have you done internal testing by internal
15 consulting expert on these rods that are like the ones
16 that you gave Mr. Branham?

17 MS. TECHMAN: I don't know the answer to that,
18 your Honor. My point was if plaintiffs --

19 THE COURT: Let's get this piece of it first.

20 He wants sauce for the goose, sauce for the
21 gander. If you want his consulting expert, the
22 protocol to be used and the results, he wants that same
23 information of your internal experts who have already
24 tested this material. And I can't believe that hadn't
25 been so. Surely to goodness you have internal experts

1 who have tested and used a certain protocol and gotten
2 results. And that's what we talked about last time.
3 That's what you quoted out, the remarks I made at our
4 last hearing.

5 What I want to have done is you give them your
6 internal experts, their protocol and what the results
7 are, and I will require him to give you his expert, his
8 consulting expert, the protocol and the results, but I
9 want those two things to go in parallel.

10 MS. TECHMAN: Your Honor, he's already discovered
11 my expert. I asked you to clear the courtroom. I
12 asked you to take us in camera. You said no, that
13 horse is out of the barn. This is Dr. Bill Longo.
14 They know him. I think they have called him. I think
15 they have those answers. I'm simply asking you to do
16 what you said when we were last here on plaintiff's
17 motion, which is that you would give Lincoln assurances
18 with regard to these finite resources.

19 THE COURT: I've heard this argument once already.
20 I'm trying to get a real specific piece of information,
21 and I don't think I'm being played with directly.

22 I want to know, A, have you got someone who
23 internally has tested this material, had a protocol and
24 has results? And you're saying that person is Bill
25 Longo?

1 MS. TECHMAN: I'm saying --

2 THE COURT: No, no. Please answer my question.

3 MS. TECHMAN: Your Honor, I am.

4 THE COURT: You're saying that this person is Bill
5 Longo?

6 MS. TECHMAN: Your Honor, my answer is that I
7 don't know if testing regarding handling was done on
8 these experimental rods. I doubt it personally.
9 Because this product was made for fume litigation, not
10 handling.

11 What I can tell the Court is that testing by
12 Lincoln of production rods, the type of rod Mr. Hopper
13 could have potentially actually used, has been done and
14 if the plaintiffs --

15 THE COURT: I'm not talking about that. I am
16 talking about whether testing has been done on these
17 rods that were made specially and that he's now got a
18 piece of along with the flux. Has that material been
19 tested internally?

20 MS. TECHMAN: Don't know, your Honor.

21 THE COURT: Let me tell you what I'm going to do
22 then. I'm going to order that Lincoln provide --

23 MS. TECHMAN: Pardon me --

24 THE COURT: -- the name of the person who tested
25 the same rod that you have given to Mr. Branham and its

1 flux and whatever else goes along with it, the protocol
2 that was used and the result that is obtained. I'm
3 going to direct the company do that within ten days.

4 I am going to direct that when that is received,
5 that Mr. Branham will have 30 days to identify for you
6 the expert that's going to test this very same stuff,
7 the protocol to be used, and when he gets a result,
8 he's going to give that to you.

9 But what's going to happen first, don't dodge me
10 around by talking about production rods or 30 years ago
11 or fume or anything like this. You have got a certain
12 kind of rod that I made y'all produce by order to
13 Mr. Branham. And you also produced the flux that went
14 with it. I am going to require the company to give to
15 Mr. Branham the name of whoever tested it, the
16 protocols used and results obtained within ten days.

17 MS. TECHMAN: May I ask a question?

18 THE COURT: Yes, ma'am.

19 MS. TECHMAN: Twice, to my information and belief,
20 the sample of five experimental rods were delivered to
21 different plaintiffs' firms.

22 THE COURT: Good. If they were delivered to
23 several different people to test, I want to know the
24 name of each person to whom they were delivered, the
25 protocol used and the results obtained.

1 MS. TECHMAN: Your Honor, we have never at Lincoln
2 been told whether any testing was done or who did it or
3 how they did it or what the results were.

4 Now, one of those folks was a gentleman named
5 Bobby Hatten. And Mr. Branham and I talked briefly
6 after the motion to compel hearing, and I thought that
7 Mr. Branham was potentially going to speak to
8 Mr. Hatten. I don't know. I'll certainly let him
9 speak to that, but he may have better information than
10 me about the testing that has been done on these rods
11 because it was twice given to two different plaintiffs'
12 firms for testing.

13 THE COURT: I'm not talking about given to a
14 plaintiff's firm. I am talking about internal testing
15 by Lincoln. There's no way that they would have given
16 samples to a plaintiff's firm and not done some testing
17 internally. I do not conceive that any company would
18 have done it that way. They would have done some
19 baseline testing before they ever turned over anything
20 to a plaintiff. That's what I want. I want to know
21 who tested it internally, I want to know what protocol
22 they used, and I want to know what the results are, and
23 I want those to be given to Mr. Branham.

24 MS. TECHMAN: So I'm clear, with regard to the
25 Court's ruling, you are requiring Lincoln to

1 potentially divulge its consulting expert privilege?

2 THE COURT: That's correct, because you are asking
3 that the plaintiff do the same, and I'm going to put
4 you on the same footing. The reason that I'm making
5 this order is because you have been required to give
6 the samples, but now you want to know before he tests
7 it who his expert is, what the protocol is that's going
8 to be used, and you want the results. And I'm going to
9 allow that because I'm going to precede it by making
10 you give up, exactly right, the internal testing that's
11 been done -- not what you sent to another plaintiff --
12 the internal testing that Lincoln did, who they used,
13 what protocol and what result. Yes, I'm ordering that
14 that be done within ten days.

15 MS. TECHMAN: And this is without regard to your
16 ruling on plaintiff's motion to compel, despite the
17 fact that you have said that plaintiffs need to let us
18 know --

19 THE COURT: I'm going to adopt the very procedure
20 I just outlined to you, which is I'm going to require
21 you to give up that information, and then I'm going to
22 allow you to receive the name of the expert, the
23 protocol to be used, and the results obtained. So
24 that's how it's going to work.

25 Do you understand?

1 MS. TECHMAN: Thank you.

2 MR. BRANHAM: Just one point of clarification.
3 Should we be able to reach an agreement with Lincoln
4 about whether or not we need to exchange that
5 information, are we free to work that out?

6 THE COURT: Absolutely. Always. But in the
7 absence of any agreement, this is how it's going to be
8 done. True sauce for goose, true sauce for gander. So
9 if you will get me an order to that effect, that's what
10 we'll do.

11 What else?

12 MR. BRANHAM: Judge, if we need to, Georgia Power
13 is a defendant in the Hopper case. They have a
14 personal jurisdiction motion they have filed. We have
15 taken some discovery. We have some dispute about the
16 discovery, and I think that counsel for Georgia Power
17 wants to be assured that if he gets this heard at a
18 later point in time, he's not going to be prejudiced by
19 not having it heard immediately.

20 THE COURT: No worries. I'm not going to use the
21 old saw, oh, you waited so long, the time just went by
22 and so forth and so on.

23 MR. HAZELTON: Andy Hazelton appearing for Georgia
24 Power Corporation. For the record, my official
25 position is I want to go forward with my motion today.

1 That's my official official position.

2 THE COURT: Understood. And your official
3 official position will be granted if that's what you
4 want to do. Mr. Branham is prepared. But I also will
5 assure you that no prejudice will obtain by having it
6 heard at some later date.

7 MR. HAZELTON: Thank you, your Honor.

8 THE COURT: What else?

9 MS. McVEY: I think that's it.

10 THE COURT: Holy moly.

11 MS. McVEY: Your Honor, the only other thing is we
12 have filed a motion to expedite the Rollins case.

13 THE COURT: I got it.

14 MS. McVEY: So it's the same type of case as
15 Hopper. The Rollins case was filed immediately after
16 Chief Justice Beatty's order saying asbestos dockets
17 would go into general --

18 MR. MERIWETHER: Circulation.

19 MS. McVEY: -- general circulation, for lack of a
20 better word. I am concerned. I'd like to get that
21 motion heard. I believe you can hear it as a circuit
22 court judge, but I don't want to -- I wanted to raise
23 that, that Mr. Early told me that they were concerned
24 about hearing that today.

25 THE COURT: Well --

1 MR. MERIWETHER: Your Honor, I don't know if Will
2 is here, but I have -- Robert Meriwether. I have some
3 clients in the Rollins case. It's my position that
4 Rollins, I don't think you had appearances by most of
5 the defendants in Rollins, and so I don't think there's
6 any way to effectively have given notice to the
7 defendants.

8 THE COURT: Well, I agree with that. And,
9 furthermore, I don't think y'all got any -- I mean, who
10 knows what the next order will be about all this, but I
11 don't think there's any real need for Mr. Early to be
12 concerned.

13 MS. McVEY: I agree. And so since we're not going
14 to hear it today, I'm wondering if we can hear it on
15 June 10th when we do the Fisher.

16 THE COURT: Yeah. And I will just say in a little
17 more general fashion since there are still some who
18 have suffered through this whole day because they have
19 various interests in asbestos litigation, if there are
20 other things that are in that same posture that you
21 want to at least get some resolution, if possible, then
22 we'll try to turn June 10th, if I can secure everything
23 forward, into a day when we hear other asbestos things
24 that are ripe to be heard.

25 MALE SPEAKER: That sounds great.

1 THE COURT: Does that make sense?

2 MALE SPEAKER: Yes, your Honor.

3 THE COURT: Why don't we just do it that way. In
4 the meantime, what we're trying to do is get together
5 and get our steering committee to come forward with at
6 least some suggestions from both sides of the bar as to
7 how we want to go forward. And I don't know if that
8 will be complete by June 10th. Perhaps we'll have a
9 little bit better idea of how we're moving with some
10 kind of memo that I might tweak and get to the Chief on
11 kind of what's happening with this docket.

12 MS. McVEY: Thank you, your Honor.

13 MR. MERIWETHER: Thank you, your Honor.

14 I would simply say that for those of us who do
15 have folks in Rollins, we would also be interested to
16 see which judge gets assigned Rollins.

17 THE COURT: I don't think anything has been
18 decided about this whole thing anyway.

19 You would want to know that before you start
20 jumping on the road of starting to hear motions.

21 MR. MERIWETHER: Precisely. And if no other
22 reason, some of the judges before whom I have appeared
23 would take it amiss if someone else accelerated one of
24 their cases.

25 MS. McVEY: Except that it is a living

1 mesothelioma case, so we need to make sure.

2 THE COURT: We'll figure out something about that.

3 MS. McVEY: Thank you, your Honor.

4 THE COURT: Okay. Court is in recess.

5 (WHEREUPON, proceedings adjourned at 3:17 p.m.)

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Certificate of Reporter

I, Diane L. Marcengill, Official Court Reporter for the Tenth Judicial Circuit of the State of South Carolina, do hereby certify that the foregoing is a true, accurate, and complete transcript of record of a portion of the proceedings had and evidence introduced in the trial of the captioned case, relative to appeal, in the Circuit Court for Richland and Hampton Counties, South Carolina, on the 7th day of May 2019.

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I do further certify that I am neither of kin, counsel,
nor interest to any party hereto.

May 8, 2019

Diane L. Macgregor

Diane L. Marcengill, RPR, CRR, CRC
Circuit Court Reporter

Exhibit 24

STATE OF SOUTH CAROLINA IN THE COURT OF COMMON PLEAS
COUNTY OF RICHLAND FOR THE FIFTH JUDICIAL
CIRCUIT

-----X
MICHAEL L. PERRY and :
LONNIE L LONG, : C/A No.
: :
Plaintiff(s), : 2023-CP-40-04072
: :
vs. :
: :
AMERICAN INTERNATIONAL :
INDUSTRIES, et al., :
: :
Defendant(s). :
-----X

Pre-Trial Hearing

BEFORE: HONORABLE JEAN H. TOAL

LOCATION: Richland County Judicial Center
1701 Main Street
Columbia, South Carolina 29201

DATE TAKEN: Tuesday, July 30, 2024

TIME BEGAN: 11:07 a.m.

TIME ENDED: 5:39 p.m.

REPORTED BY: Corinne J. Blair,
Certified Real-Time Reporter
Certified Court Reporter
Registered Professional Reporter
Certified Live-Note Reporter

EveryWord, Inc.
P.O. Box 1459
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1 (Hearing begins at 11:07 a.m.)

2

3 MS. McVEY: Your Honor, I believe you
4 remember Rachel Gross from the plaintiffs'
5 case?

6 THE COURT: Yes.

7 MS. McVEY: And Ben Adams, who tried the
8 Glenn case with us, is also here representing
9 the Perrys.

10 THE COURT: Very good.

11 And for the defense, Mr. Brown.

12 MR. BROWN: Mitch Brown, Nelson Mullins,
13 for the Johnson & Johnson defendants.

14 MS. PEPKE: Amy Pepke with Butler Snow of
15 the Johnson & Johnson defendants.

16 MR. COWAN: Chris Cowan, Your Honor, for
17 the Johnson & Johnson defendants.

18 MS. BUENO: Kim Bueno from Butler Snow for
19 Johnson & Johnson defendants.

20 THE COURT: Very good.

21 MR. McCONNELL: Your Honor, Steve
22 McConnell on behalf of defendant Vi-Jon.

23 THE COURT: All right.

24 MR. McCONNELL: Melissa Geist. She's with
25 Reed Smith.

1 MR. ROZELSKY: Kurt Rozelsky, Spencer,
2 Fane, local counsel for Vi-Jon.

3 THE COURT: All right. Now, before we
4 begin, Mr. Early --

5 MR. EARLY: PTI Royston.

6 THE COURT: Right. Mr. Early represents
7 PTI Royston, and I'd like to put on the record
8 the status of PTI Royston in this case at this
9 time. Mr. Early.

10 MR. EARLY: Yes, ma'am. Plaintiffs and I
11 have come to an agreement where I'm no longer
12 in the case.

13 THE COURT: Very good. So PTI Royston is
14 out of the case now.

15 MS. McVEY: And, Your Honor, that also
16 goes for Cosmetic Specialties; that they have
17 resolved, as well.

18 THE COURT: All right. Cosmetic
19 Specialties has resolved, so they're gone. So
20 now the case is Johnson & Johnson, Long's
21 Drugstore. Is that it?

22 MS. McVEY: And Vi-Jon.

23 THE COURT: And Vi-Jon.

24 MS. McVEY: And, Your Honor, there are a
25 couple of additional defendants, but we are

1 very close to resolution. They're represented
2 by Mr. Meriwether and Mr. Glenn.

3 THE COURT: Mr. Glenn, Mr. Meriwether,
4 welcome.

5 MR. MERIWETHER: Thank you, Your Honor.
6 We're delighted to be here for a very brief
7 period. We are virtually resolved.

8 THE COURT: Great. Now, Vi-Jon, if y'all
9 are going to participate, you need to be up
10 here at counsel table and not sitting in the
11 back. Y'all have got to figure out a way to
12 make everybody --

13 MS. McVEY: Your Honor, I was remiss in
14 not also mentioning that AII Clubman, is also
15 in this case. They're in default, as you
16 recall.

17 THE COURT: Right. AII Clubman is in
18 default. And so they would be in this case for
19 damages, only.

20 MS. McVEY: That's right.

21 THE COURT: And if everybody else
22 resolves, then we'll figure out a way to have a
23 damages hearing for them.

24 MS. McVEY: Okay. Thank you, Your Honor.

25 THE COURT: All right.

1 MS. BUENO: Your Honor, if I may, on
2 behalf of Johnson & Johnson, just so the record
3 is clear, there are four entities that we are
4 representing.

5 THE COURT: Right.

6 MS. BUENO: So Johnson & Johnson; Kenvue
7 Inc.; LLT Management, LLC; and Johnson &
8 Johnson Holdco (NA) Inc., just for the record.

9 THE COURT: Right. Okay.

10 MS. BUENO: Thank you.

11 THE COURT: Very good.

12 Okay. And, you know, what I understand to
13 be the situation now -- y'all can sit. You can
14 see how everybody is going to be...

15 Miss Flynn, you got something before we
16 get started?

17 MS. FLYNN: Yes, Your Honor. I'm here on
18 behalf of American International Industries. I
19 do have just a quick statement for the Court
20 whenever we get started.

21 THE COURT: Yeah. Is it something that
22 has to do with the status in the case?

23 MS. FLYNN: Your Honor, last evening we
24 filed a motion to stay, just based on the fact
25 that we've got a petition for a writ of cert

1 pending with the Supreme Court.

2 THE COURT: A writ of cert on this case?

3 MS. FLYNN: Your correct, Your Honor.

4 That's filed a few weeks ago. That's been
5 fully briefed. They've responded to it before
6 the Supreme Court. We've replied and that's
7 pending before the South Carolina Supreme Court
8 on this default issue.

9 So that's -- we just filed a motion to
10 stay last night. I know they haven't had a
11 chance to respond to it.

12 THE COURT: What is the basis -- before
13 I've done anything by way of a final ruling,
14 what's the basis for an appeal at this time?

15 MS. FLYNN: I believe the Court might be
16 aware of the basis for an appeal. It's that
17 the first amended complaint became the
18 operative complaint once it was filed. We
19 responded to the first amended complaint. The
20 second amended complaint was then filed. We
21 responded to that. We also, by virtue of our
22 responses to that, those became the operative
23 complaints and we obviated the default.

24 THE COURT: Right. I understand the
25 merits of the claim. How is that appealable

1 now?

2 MS. FLYNN: It's a novel issue that South
3 Carolina Courts have not ruled upon in an
4 appellate decision as to whether the filing of
5 the first submitted complaint moves to the
6 original complaint and becomes the operative
7 complaint.

8 THE COURT: I get all that, but let's
9 say -- let's put that question aside for a
10 moment. This matter has not concluded yet.
11 You've been placed in default, but then it gets
12 to be a default hearing. Tell me the reason of
13 appellate court proceedings that allows you at
14 this moment to appeal.

15 MS. FLYNN: We filed a petition for a writ
16 of cert so that the Court could address that
17 novel question and decide whether the case --

18 THE COURT: Yeah, but even a petition for
19 certiorari also has to await the conclusion of
20 the case. Your case isn't concluded yet. This
21 is the same thing that's driving me nuts about
22 the case that I spent all morning on, which is
23 this business of filing appeals before you can
24 file appeals.

25 So I simply say that by means of saying

1 this. You proceed at your peril. I don't know
2 how you're up there when we haven't concluded
3 your case here. All that's happened is you've
4 been placed in default. You can contest that
5 when the case is concluded. I don't understand
6 your basis for going up there now, and I don't
7 see that as staying the activities here, but I
8 may stand to be corrected by my betters. I'm
9 nothing but a simple judge. But I just say
10 that to you to let you know that you might not
11 want to stray too far from here.

12 MS. McVEY: And, Your Honor, just to be
13 clear, this is feeling a lot like Sarah Plant,
14 right, where they remove the case the morning
15 of trial; that they filed last night at
16 midnight, the day before this pretrial hearing
17 that they've known about for weeks or months or
18 however long, a motion to stay our case for a
19 living plaintiff.

20 Now, I expect, if you even entertain that,
21 you're going to deny it. And if you deny it, I
22 expect they're going to even want to appeal
23 that. And I have several court orders from
24 where a denial of a motion to stay has been
25 appealed by some of these asbestos defendants

1 which the Court of Appeals says is not
2 immediately appealable.

3 Now, I want to put on the record that if
4 anybody tries to stay our case or move our case
5 the morning at trial, whatever it is that has
6 happened in the past, recent past on this, we
7 will be moving for sanctions.

8 This is a living plaintiff. We've spent
9 money. Our experts are coming. So I just warn
10 everybody, because the writ of certiorari, this
11 extraordinary thing is about a default. (sic)
12 Can you imagine the Supreme Court granting a
13 writ of certiorari for every single default in
14 the state?

15 THE COURT: No, I cannot. And that's
16 simply what I'm saying; is I regard that as
17 something that is intended -- that is submitted
18 for purposes of delay, and we will deal with it
19 accordingly. But, you know, you do what you
20 got to do.

21 But it gets to be a point where the
22 sanctity of these rules aren't going to be
23 enforced. And people aren't going to do this
24 anymore. And clients need to be told, "Hey,
25 you can't do that in South Carolina." In some

1 states, they let all this stuff proceed with
2 appeal and everything. We're a small state
3 with a small bench and a small appellate court,
4 and we have various rules in that regard.

5 So I tell you that. I wouldn't stray far
6 from here if you're going to really insist upon
7 that. And if I were you, I would look at my
8 clients a little bit more strongly about
9 whether you proceed like this. This business
10 of last-minute attempts to stay proceedings in
11 this court have never been successful.

12 MS. FLYNN: Your Honor, if I may preface
13 it by saying we don't want to stay the case.
14 We want to participate in the case. That's
15 all --

16 THE COURT: But you want to stay your
17 situation in the case, for sure. And all
18 that -- all that means is just everybody else
19 would try it and then I'd have to come back
20 here and try your case with a plaintiff that
21 might or might not be alive at that time. No.

22 MS. FLYNN: What we want to do is avoid
23 that piecemeal approach. We want the entire
24 case to be tried once and for all --

25 THE COURT: Yeah, but it's not going to be

1 binding on you. You can't have a foot in both
2 camps. If you say you're on appeal now, it's
3 not going to bind you. If you have a
4 legitimate appeal, then you come back at some
5 later time and try your case. You see the bind
6 you're in?

7 MS. FLYNN: I understand, Your Honor.

8 THE COURT: All right. I just -- that's
9 how it is with me. I wouldn't stray far from
10 being involved in this case, but it's up to you
11 and your client.

12 MS. FLYNN: Yes, Your Honor.

13 THE COURT: The fact it is novel is not
14 going to make one piece of difference about
15 whether it's appealable or not at this time.
16 Okay.

17 Summary judgment. The first one is
18 Johnson & Johnson.

19 MR. BROWN: Your Honor, Mitch Brown. I
20 just want to introduce Ms. Pepke, who's going
21 to argue this. I did want to -- especially
22 since Ms. McVey mentioned what she did, I
23 wanted to bring up an issue so that we don't
24 run off any rails on this one, which is this is
25 an effort, as I understand it, to amalgamate

1 entities or otherwise blur entities or create
2 success reliability, which we understand -- and
3 if she agrees, it's not an issue -- but we
4 understand it to be an issue for the Court
5 because we believe that's an equitable issue.

6 THE COURT: I don't understand what --
7 you've got to give me a little background about
8 what you're talking about.

9 MR. BROWN: I'm talking about -- well,
10 maybe Ms. Pepke should argue the motions first,
11 but I'm giving you a clear indication here. I
12 just want to -- I want to give --

13 THE COURT: Are you trying to stop the
14 trial of this case?

15 MR. BROWN: I'm trying to give you some
16 forewarning, Your Honor, that we believe that
17 these issues about success reliability,
18 amalgamation, and things like that are matters
19 for the Court. They're not jury questions.
20 Now, if Ms. McVey agrees with that, then --

21 THE COURT: Oh, okay. I get what you're
22 saying.

23 MR. BROWN: That's what the issue is. I
24 just want to bring it --

25 THE COURT: I got you --

1 MR. BROWN: I don't want to surprise
2 anybody.

3 THE COURT: I'm following you now. I'm
4 tracking you.

5 MR. BROWN: Okay. Thank you. Ms. Pepke
6 will argue the motion.

7 MS. PEPKE: Good morning -- or actually,
8 good afternoon, Your Honor. I'm going -- we
9 have a lot of motions on the docket, so I am
10 going to do my best not to reargue what's not
11 briefed, and focus on the issue that really
12 needs to be decided considering the plaintiffs'
13 response.

14 (Clarification requested by the
15 official court reporter.)

16 THE COURT: She's going to pick you up a
17 lot better if you come there.

18 MS. PEPKE: How's this? Okay. Wave at
19 me. I will admit to having a tendency to get
20 excited and go fast. Just flag me down.

21 Again, good afternoon, Your Honor. We've
22 moved for summary judgment on four discrete
23 issues, although I will note, we have a
24 footnote on this success reliability issue. We
25 filed a motion to dismiss. Your Honor denied

1 that motion to dismiss. But we had
2 incorporated those arguments into our motion
3 for summary judgment. That's kind of where
4 Mr. Brown was going.

5 THE COURT: I get that. I was just not
6 tracking.

7 MS. PEPKE: There are a lot of parties and
8 a lot of issues. I'll focus on the four
9 substantive claims that we addressed in our
10 motion.

11 First was the negligence, per se. I
12 understand plaintiffs' response on that to
13 concede, in essence, that they are not pursuing
14 that anymore. They had no response. So I'm
15 not going to reargue those points unless they
16 contest that, but they had no section rebutting
17 our arguments for negligence, per se.

18 That takes us to our challenge to their
19 fraud and fraudulent misrepresentation claim.

20 As Your Honor is well aware, one of the
21 elements of those claims is reliance. In their
22 response, they, essentially, concede. They
23 have no evidence that Mr. Perry relied on any
24 misrepresentation by our client. They attached
25 a few exhibits. One, a guidebook that went to

1 a hospital, not to Mr. Perry. They attached an
2 ad from 1965, which is before he was born. No
3 evidence that he saw any of that.

4 What they argue in response isn't that
5 Mr. Perry relied on anything; they assert a
6 novel argument. I'm going to call it reliance
7 by proxy. They argue that representations that
8 the Johnson & Johnson defendants or Johnson &
9 Johnson made to the FDA was the fraud and the
10 misrepresentation. And that induced the FDA to
11 act, and I guess not requiring a warning label
12 or not pulling the product, or requesting that
13 the product be pulled, and that is what led to
14 Mr. Perry's injuries.

15 So they have -- they cite no case law for
16 this reliance by proxy argument. And I would
17 suggest, Your Honor, that what they really are
18 arguing is fraud on the FDA. And fraud on the
19 FDA, as I'm sure you're aware, is a claim that
20 is pre-empted under Buckman (ph) of the United
21 States Supreme Court. They simply have no case
22 law to support their position that this would
23 somehow satisfy the reliance element of their
24 fraud or fraudulent misrepresentation claim
25 and, therefore, it should be dismissed.

1 That takes us to our third issue, which is
2 the conspiracy to commit fraudulent
3 misrepresentation.

4 Obviously, Your Honor, it requires the
5 underlying claim of fraudulent
6 misrepresentation. If they do not have that,
7 they do not have conspiracy. In addition, they
8 have no evidence of -- of the actual
9 conspiracy, even if there was the underlying
10 fraudulent misrepresentation claim. They have
11 no overt act by Johnson & Johnson or any of the
12 J&J defendants, much less evidence that the
13 purpose of some conspiracy was to injure
14 Mr. Perry. And that is the Sky Dive Myrtle
15 Beach case, 426 South Carolina 175, 2019. The
16 plaintiff must prove defendant acted for the
17 purpose of injuring the plaintiff. They have
18 absolutely no evidence of that.

19 And, again, to the extent what they're
20 arguing is it was a conspiracy to submit and
21 persuade the FDA not to require a warning label
22 or not to act on the allegations of asbestos in
23 talc, that is, of course, a fraud on the FDA
24 argument, which is completely pre-empted under
25 Buckman.

1 The last claim that we addressed in our
2 motion for summary judgment was the loss of
3 consortium claim. At the time we filed, we had
4 not seen evidence of a marriage. Perhaps
5 before Mr. Long's deposition, we received a
6 copy of a marriage certificate from Ontario.
7 I'll be quite frank with Your Honor. I spent
8 quite a bit of time looking at this because it
9 was interesting and I wasn't sure what the
10 answer was.

11 At the time they were married in 2009,
12 same-sex marriage, of course, was not legal in
13 South Carolina. There was a statute and also a
14 constitutional provision that outlawed same-sex
15 marriage; that it was not recognized in South
16 Carolina at the time.

17 I could not determine what that meant for
18 the recognizing of marriage today, although I
19 did find, in full disclosure to the Court, a
20 district court opinion, the Braddocks case that
21 would seem to indicate that South Carolina
22 statute and the constitutional amendment were
23 invalid from the beginning.

24 And so I think that means that the
25 marriage is recognized now in South Carolina.

1 I just want to flag it, because I, quite
2 frankly, am not sure what the right answer is
3 on that.

4 And, of course, if the marriage is not
5 valid in South Carolina, then there is no
6 consortium claim under the statute. It must be
7 espoused.

8 THE COURT: Well, you argue that if the
9 marriage is not valid. South Carolina
10 certainly recognizes the validity of marriage
11 in other states. And sometimes other states
12 have different requirements for age, and so
13 forth, than South Carolina. And South
14 Carolina, nevertheless, recognizes marriages
15 from other states that might not have been
16 legal in this state.

17 And all states had to deal with that way,
18 way before we ever got into the current
19 situation of same-sex marriages. And the --
20 uniformly, it has been ruled that New York
21 statutory differences don't invalidate the
22 recognition of a marriage from a state where
23 they're different. Marriages would have been
24 illegal under South Carolina law, because they
25 offended some separate provision, such as

1 penniless marriages. It may be in a different
2 category, but for same-sex marriages that were
3 entered into in a jurisdiction where those
4 marriages were legal, my understanding is --
5 the few pieces of litigation I've seen is that
6 they would be recognized here.

7 MS. PEPKE: I believe that was the issue
8 in the Braddocks case.

9 THE COURT: Right. Exactly. And that's
10 one of ours.

11 MS. PEPKE: Well, it is out of the United
12 States District Court for --

13 THE COURT: Exactly. But Braddocks was
14 the influence upon the South Carolina Supreme
15 Court.

16 MS. PEPKE: Yes.

17 THE COURT: When we first dealt with the
18 issue, when it was brought to us by
19 Judge Condon, on the issue of whether to issue
20 a marriage license, and Braddocks, which dealt
21 with a different factor scenario, to wit, the
22 very thing we're talking about here, is
23 something I would certainly rely on to say the
24 marriage, if it is not otherwise the product of
25 some separate illegality, would be recognized

1 here.

2 MS. PEPKE: Understood, Your Honor. And
3 all I wanted to do was flag it and how I have,
4 um, kind of chased it down since we filed our
5 motion.

6 THE COURT: Yeah.

7 MS. PEPKE: Thank you, Your Honor.

8 Do you have any other questions for me
9 right now?

10 THE COURT: I don't.

11 MS. PEPKE: All right.

12 THE COURT: All right. Ms. McVey.

13 MS. McVEY: Thank you, Your Honor.

14 Let me just start with the marriage. It's
15 clearly valid. It's a clearly -- in their
16 motion, they just say we've not seen any
17 evidence that there was a marriage, although
18 they both testified extensively about their
19 marriage, their long and loving marriage.

20 Then we actually gave them -- by the way,
21 I've never had a defendant ask me for a
22 straight couple, a heterosexual couple, a
23 marriage license ever. Never. Never had that
24 happen. Never had to give one.

25 So when we did that, now we're going maybe

1 South Carolina doesn't recognize gay marriage.

2 THE COURT: I'm prepared to rule that the
3 marriage would be recognized under the
4 authority of the federal litigation and,
5 therefore, consortium could be solved.
6 Consortium damage could be solved. So I don't
7 think we need a whole big, long thing about it.

8 MS. McVEY: Thank you. And I just
9 footnote that to you, much like she did, to say
10 because this is a gay couple, there may be some
11 issues we need to address down the line so we
12 aren't inadvertently triggering something in
13 the jury, much like we would with an
14 interracial couple, that kind of thing. I just
15 want to flag it for the Court.

16 THE COURT: Yes, I'm sensitive to that. I
17 have no doubt but what Mr. Brown and his
18 co-counsel will be sensitive to that, as well,
19 and we will figure out some appropriate things
20 to do, if we need to, to be sure that the case
21 is fairly tried and that no untoward feelings
22 about this sort of thing and this sort of
23 marriage get in there that might be solved in
24 voir dire, or there might be some other way to
25 solve it. Simply by an instruction from me,

1 which is generally the way I try to deal with
2 these things, rather than have people be forced
3 to take positions about matters. But we'll
4 figure out a way to deal with that.

5 MS. McVEY: Thank you, Your Honor.

6 Just briefly, I know you've read all the
7 briefing. We extensively went through
8 Mr. Perry's use of Johnson & Johnson baby
9 powder. And he used it, he testified, from
10 1974 to 2019. He testified he was allergic to
11 deodorant, and he used Johnson & Johnson baby
12 powder from the time his mom taught him to use
13 it all the way up until 2019, and he would
14 apply it, as he said, from his neck down, under
15 his armpits, all down the body to his feet. He
16 testified he bought at least ten bottles every
17 year of Johnson & Johnson baby powder. So that
18 Mr. Johnson -- they do not dispute that Mr.
19 Johnson -- I'm sorry, Mr. Perry was exposed to
20 Johnson & Johnson baby powder extensively.
21 That's not where they go. I'm not going to go
22 into detail, but you know that he described
23 that when he used it what a mess it made. It
24 went everywhere. He had to clean it up. He
25 inhaled it. It was a white cloud. He

1 testified as to his - that his mom taught him
2 to use Johnson & Johnson baby powder from the
3 time he's a little guy all the way up, and that
4 he was around her when she was using Johnson &
5 Johnson baby powder.

6 He testified -- and this is important,
7 because they didn't mention this to you. He
8 testified that he and his family were brand
9 loyal to Johnson & Johnson. And he testified,
10 "We've always used it. We all touched it. We
11 all trusted it. That was part of our culture."
12 And they trusted it because of the
13 representations that Johnson & Johnson made to
14 the public, including Mr. Perry. Right. And
15 you'll see it; we put it in there, the
16 handbooks, the ads, "Mom, put this powder on
17 your babies, it's safe for them." He relied on
18 that.

19 And while Johnson & Johnson was making
20 these false representations about how safe it
21 was, Johnson & Johnson -- we have this in our
22 briefing -- knew for decades that the talc they
23 used to manufacture the body powder contained
24 asbestos, and they knew that beginning in 1949.

25 And, Your Honor, in our brief from pages

1 six to nine, we kind of outline all the
2 testing, decades worth of testing. And that's
3 not all of it. That's just in the brief.

4 Johnson & Johnson mislead and concealed
5 the known information from the public,
6 including Mr. Perry. They lied to regulatory
7 bodies, and courts. And why did they do that;
8 what was the motive? Well -- and we cite this
9 in all the exhibits in the paper -- they
10 describe their baby powder as the golden egg,
11 the flagship product, the sacred cow. Johnson
12 & Johnson sought to -- and you see it in their
13 documents -- to capitalize on the mother and
14 baby emotional bond, the trustworthiness
15 associated with the brand. And they noted it
16 would be very bad for business and damage
17 Johnson & Johnson's reputation if it ever came
18 out that the baby powder contained asbestos.
19 And we cite to that testimony.

20 Johnson & Johnson adopted a strategy over
21 decades of being ruthless. And you see that in
22 the Johnson & Johnson memo in the NIOSH study.

23 They were generating marginal scientific
24 data for national coverage for defending the
25 product. They were buying the science.

1 Johnson & Johnson memo from 1975 discusses
2 management authorizations for additional talc
3 safety studies. And they even started
4 attacking the public health community by
5 creating what they called enemies list. In
6 1972, that J&J had an antagonistic
7 personalities memo. (sic)

8 At the same time they were doing all this,
9 they knew all their testing; they were
10 promoting the purity of the brand and made
11 other claims to the public that Johnson &
12 Johnson knew it could not support.

13 THE COURT: Ms. McVey.

14 MS. McVEY: Yes.

15 THE COURT: I'm very familiar with your
16 filing on this. I have tried a good many
17 Johnson & Johnson cases. Very familiar with
18 the contentions that are made, both sides,
19 about the records of Johnson & Johnson.

20 I will deny the motion on the summary
21 judgment as to the negligence to the first
22 issue. So, all right.

23 What else do I have to --

24 MS. McVEY: Your Honor, they moved for a
25 summary judgment on the fraudulent

1 misrepresentation and the fraud.

2 THE COURT: Right.

3 MS. McVEY: And that's really what I was
4 going through, what Johnson & Johnson was
5 representing to the public and --

6 THE COURT: I've tried those cases before.
7 The fraud is -- the representations they made
8 to the public in the face of the testing that
9 they had done, that's clearly a contested
10 matter of fact. And, therefore, I will deny
11 summary judgment with respect to the fraud
12 count.

13 MS. McVEY: Thank you, Your Honor.

14 The last one, they moved to, is conspiracy
15 and we are going to withdraw our conspiracy
16 claim against Johnson & Johnson.

17 THE COURT: Very good.

18 Negligence, per se, challenges to fraud,
19 and the consortium would go -- yes, ma'am.

20 MS. McVEY: Pardon me, Your Honor. I just
21 wanted to address negligence, per se. They
22 said we didn't address it. That was
23 inadvertent.

24 We have a statute -- filing a statute in
25 South Carolina is, of course, evidence of

1 negligence, per se. And in this case, the
2 evidence that they violated a statute is a
3 strict liability statute, right?

4 THE COURT: That's right. I've tried
5 these cases many times and that's the basis for
6 it. Certainly, your projections are noted, and
7 your positions are protected.

8 MS. PEPKE: Thank you, Your Honor.

9 MS. McVEY: Thank you, Your Honor.

10 THE COURT: Okay. That summary moment is
11 Johnson & Johnson, et al.

12 MR. BROWN: Your Honor, may I mention one
13 other thing on this mode of trial issue before?
14 Just wanting to make sure, I understand Your
15 Honor just ruled, which is understandable and
16 we get that. It's the other entities that are
17 being locked in and Ms. Bueno listed out, and I
18 think they are asserting that all of them also
19 committed fraud or also committed things --

20 THE COURT: They are.

21 MR. BROWN: -- and if they are asserting
22 that they are mere continuations, they're
23 amalgamated, that type of thing --

24 THE COURT: Indicated.

25 MR. BROWN: -- our point is, it would be a

1 court matter, not a jury matter. That issue of
2 whether they should be disregarded as separate
3 would be not for a jury; it would be for the
4 Court. The only reason I bring it up is
5 because of what Ms. McVey said, especially
6 that's a mode of trial issue. If she wants it
7 to be in front of a jury -- I still don't know.
8 Maybe she doesn't. But if she wants that --

9 THE COURT: She wants it to be in front of
10 a jury. She wants the whole group to be for
11 the jury on the theory of amalgamation. And we
12 certainly -- that's certainly a recognized
13 platform in South Carolina. Kincaid comes to
14 mind.

15 MR. BROWN: Right. The -- I understand
16 that she would want them there --

17 THE COURT: Yeah.

18 MR. BROWN: -- for a jury determination.
19 The issue I'm raising, which I'm trying to be
20 clear here -- maybe not doing a good job -- is
21 the question of whether there should be success
22 reliability or --

23 THE COURT: I'm not going to have a trial
24 within a trial, or a trial before the trial,
25 Mr. Brown, on that issue. If I'm wrong about

1 it, your position on appeal will be protected,
2 but I intend to allow all parties to go
3 forward.

4 MR. BROWN: Understood.

5 THE COURT: If you got some other find
6 that you want to make to protect your position,
7 fine, but I'm not going to spend a whole lot of
8 time on having some kind of separate proceeding
9 before I try this case. This case is going to
10 be tried Monday. I'm not going -- y'all
11 springed this right at the last on me. I've
12 got this huge stack of boxes just recently with
13 all of your contentions on. I'm not going to
14 stop this thing and go through a brief
15 determination on that.

16 MR. BROWN: I don't think you need to stop
17 it, Your Honor. I just think it's the Court's
18 decision, not the jury's decision.

19 MS. McVEY: Your Honor, I'm sorry to
20 interrupt you, but I haven't seen any of your
21 briefing on this. I don't actually know what
22 you're talking about. I do know that she
23 denied the motion to dismiss, again --

24 THE COURT: That's correct.

25 MS. McVEY: -- and so we are going forward

1 with this, but I -- it's hard for me to make it
2 --

3 MR. BROWN: We'll file a brief on it. And
4 make -- I mean, there are a couple --

5 MS. McVEY: These are jury questions and
6 we need to know -- everybody goes on the jury
7 form --

8 THE COURT: Yes.

9 MS. McVEY: -- that you denied the motion
10 to dismiss. That's our expectation.

11 MR. BROWN: So we don't know until she
12 just tells us that all these issues of success
13 or -- reliability, amalgamation, are going to
14 be determined by the jury, if she wants them to
15 be, instead of Court. We're saying the Court
16 is the one that decides that, if they're not
17 genuine issues of material fact that are at
18 play. And I think --

19 THE COURT: Your contentions about that
20 will be noted when you are reduced to some sort
21 of briefing, Mr. Brown. But this is late in
22 the day to do that.

23 MR. BROWN: Understood.

24 THE COURT: I sometime ago denied the
25 motion to take these parties out of the case.

1 And this comes very late. And I probably will
2 simply deny it and let you preserve your
3 position going forward.

4 MR. BROWN: Okay. Your Honor, we'll file
5 something.

6 THE COURT: Very good.

7 MS. McVEY: Thank you.

8 THE COURT: I'm not trying to limit you in
9 what you file. I'm trying to preserve your
10 position, but my intention is just to move
11 forward.

12 MR. BROWN: Understood.

13 THE COURT: Okay. All right. Now, Long's
14 Drugstores.

15 MR. ADDISON: Afternoon, Judge. How are
16 you?

17 THE COURT: I'm fine.

18 MR. ADDISON: I'm not going to belabor too
19 much. I think you got my memo in front of you.
20 I don't think you need a whole lot of
21 information from me. Ms. McVey and I were
22 talking beforehand. Their response -- they're
23 actually revoking some information. Their
24 response that Mr. Long -- who testified that he
25 bought the product from my client, Long's

1 Drugstores -- their indication is that is not
2 accurate. There is no testimony from
3 Mr. Long's within his very long deposition --
4 four-day long deposition -- that he bought any
5 type of talc-containing materials from my
6 client.

7 THE COURT: Did you attend his deposition?

8 MR. ADDISON: No, ma'am. We were not a
9 party at the time.

10 THE COURT: When did you become a party?

11 MR. ADDISON: In the second amended
12 complaint in February.

13 THE COURT: All right. Have you asked
14 them for any information since that time about
15 this?

16 MR. ADDISON: We have. I talked to Ms.
17 McVey. Basically, Mr. Long --

18 THE COURT: I'm talking about
19 interrogatories --

20 MR. ADDISON: -- and Mr. Perry -- yes,
21 ma'am. We submitted all of that. Mr. Perry
22 has not submitted any kind of information to us
23 that he's ever purchased from Long's
24 Drugstores.

25 THE COURT: All right. Well, I'll see

1 what she has to stay.

2 MR. ADDISON: I'll rely on my brief. If
3 you need anything else, I'll answer --

4 THE COURT: Well, your brief is a rather
5 short thing. It just said we didn't do it.

6 All right. Ms. McVey.

7 MS. McVEY: Your Honor, thank you. And
8 let me be clear that I am incorporating our
9 brief in response -- our 19-page brief or 50
10 some exhibits, the corporate representative
11 testimony of Long's and others.

12 Mr. Addison is correct in that Mr. Perry
13 was deposed before Long's was a defendant in
14 the case. So the testimony we have is not --
15 we don't have anything from Mr. Perry that he
16 purchased from Long's. What we have, and our
17 basis for filing against Long's was that
18 Mr. Perry worked in the hotel business. He
19 traveled to Columbia often and there were
20 several hotels where he would come and stay in
21 Columbia. He did use the talcum powders in
22 Columbia, including Gold Bond. At the time,
23 Long's had three stores in Columbia. They -- I
24 think one or two had kind of small retail-like
25 places where they likely sold Gold Bond and

1 Johnson & Johnson. But he is correct that Mr.
2 Perry did not testify that he actually bought
3 the product from Long's Drugstore.

4 THE COURT: So what is your basis for
5 including them in? I know he says he purchased
6 Gold Bond when he was traveling, but his
7 deposition was taken before you added Long's.

8 What I'm trying to do is pick some piece
9 of evidence that you're going to put in that
10 shows that he actually made a purchase from
11 Long's, either by way of his testimony or
12 somebody else's. So tell me what that is.

13 MS. McVEY: I don't have that, Your Honor.
14 What I do have is that he bought talcum powder
15 here. He did not say that he bought it from
16 Long's.

17 THE COURT: All right. Very good.

18 MS. McVEY: Thank you, Your Honor.

19 THE COURT: I will grant the motion for
20 summary judgment as to Long's.

21 MR. ADDISON: Your Honor, we had --

22 THE COURT: Sir.

23 MR. ADDISON: There was several. We also
24 had consortium and -- all three counts you're
25 granting?

1 THE COURT: I'm granting you summary
2 judgment and letting you out of the case.

3 MR. ADDISON: That's what I'm asking.
4 Thank you. That's all I'm asking. I just
5 wanted to be clear.

6 THE COURT: All right. We're going to
7 file a Form 4 that just says your motion is
8 granted. I'm not going to spend any time on it
9 other than that.

10 All right. Vi-Jon.

11 MS. GEIST: Melissa Geist.

12 OFFICIAL COURT REPORTER: Spell your last
13 name.

14 MS. GEIST: G-E-I-S-T.

15 Justice Toal, good afternoon. May it
16 please the Court. Your Honor, I haven't had
17 the pleasure of being in front of you yet, so I
18 just wanted to introduce myself. Again, my
19 name is Melissa Geist. I represent Vi-Jon.

20 And, Your Honor, I think it's important to
21 just -- let me briefly introduce Vi-Jon and who
22 they are, just so Your Honor is generally
23 aware. So I think Your Honor had said a couple
24 of times, this is a small court, small
25 courtroom. Vi-Jon is a small company. They

1 have two manufacturing sites in Tennessee
2 and --

3 THE COURT: I'm familiar with Vi-Jon.
4 Vi-Jon makes Equate and Wal-Mart sells it,
5 right?

6 MS. GEIST: At certain points in time,
7 Your Honor.

8 THE COURT: I understand we're going to
9 talk about what those are. I'm not completely
10 unfamiliar. I know Equate.

11 MS. GEIST: Thank you. Thank you, Your
12 Honor. I was just going to say that Vi-Jon has
13 manufactured nail polish remover, mouthwash,
14 antibacterial soap, and, at times, you are
15 correct, Your Honor, Vi-Jon has manufactured
16 talcum powder products for retailers like
17 Wal-Mart at certain times. And we are here --
18 your Honor is correct -- because at times
19 Vi-Jon manufactured the Equate baby powder
20 product.

21 But, Your Honor, I'm standing in front of
22 you, again, seeking summary judgment and
23 dismissal of the case as to Vi-Jon, because
24 there is no evidence that would -- that would
25 permit this case to go forward.

1 Our position is Vi-Jon should not even be
2 here next week, Your Honor. And the reason, I
3 think, is very, very simple. Earlier today,
4 Your Honor, in connection with other arguments,
5 you said a couple of times, let's talk about
6 the heart and soul of the case. The heart and
7 soul of the case with respect to Vi-Jon, the
8 claims Mr. Perry has against Vi-Jon, is
9 plaintiffs must prove that Mr. Perry used the
10 Equate product and that it contained asbestos.

11 THE COURT: Right. Number 1.

12 MS. GEIST: Number 1 --

13 THE COURT: Excuse me.

14 MS. GEIST: Number 1, Your Honor, core
15 part of the case: Is there proof that there
16 was asbestos in the Equate --

17 THE COURT: Yeah, that -- that's -- hang
18 on for a minute.

19 MS. GEIST: Yes, Judge.

20 THE COURT: You say that y'all
21 manufactured talcum powder from July of 2016.
22 I don't know what the evidence will show about
23 that. Ms. McVey can tell us in a minute. But
24 he testified he used Equate from 2003 to 2018
25 or '19. That would encompass the period of

1 time when you say that Vi-Jon was manufacturing
2 Equate. So let's go on to talk about the
3 second half of it.

4 MS. GEIST: Okay. Well, the second half,
5 Your Honor --

6 THE COURT: Does it contain asbestos?

7 MS. GEIST: Well, the first part is, there
8 was no evidence of asbestos in the Equate
9 product. The primary testing expert on behalf
10 of plaintiffs --as I'm sure you're very
11 familiar -- is Dr. Longo.

12 Dr. Longo never tested a single bottle of
13 Equate. Dr. Longo is the primary testifying
14 expert for plaintiffs on testing. There is
15 nobody that is going to get up in the
16 plaintiffs' case and stand before the jury and
17 say that they tested a bottle of Equate and
18 found asbestos. There is no evidence of that
19 in this case.

20 THE COURT: All right. Other ways that
21 asbestos in a particular product is -- proves
22 by showing that the product used talc from
23 certain mines and showing that those mines
24 contained asbestos. So what's the deal about
25 that?

1 MS. GEIST: Well, Your Honor, we
2 understand, because we asked Dr. Longo at his
3 deposition, "Did you test the Equate product?"

4 "No."

5 THE COURT: Okay. He didn't test it.

6 MS. GEIST: He didn't test it, and he
7 doesn't intend to for purposes of this case.

8 THE COURT: Right. I got you.

9 MS. GEIST: And we understand -- although
10 we're guessing a little bit -- we understand
11 that plaintiff's counsel will ask hypothetical
12 questions of Dr. Longo in front of the jury and
13 ask questions like, you know, "Have you found
14 veins of asbestos in certain mines? Assuming
15 that Vi-Jon's talc used in the Equate brand
16 product came from those mines, can you conclude
17 that the product contained asbestos."

18 THE COURT: Right.

19 MS. GEIST: We assume that that is going
20 to be --

21 THE COURT: Okay. If it is, what evidence
22 have they got that as to what mines Equate got
23 its talc from?

24 MS. GEIST: Well, Your Honor, if we are at
25 trial here in front of Your Honor next week,

1 obviously, a Vi-Jon representative will testify
2 about the source of the talc that --

3 THE COURT: Well, they, obviously, have
4 deposed --

5 MS. GEIST: Well --

6 THE COURT: After I figure out whether
7 there will be any evidence that can be put
8 before the jury next week that shows that the
9 mines in which Equate produced its material
10 contained asbestos, is there some evidence
11 along those lines?

12 MS. GEIST: Well, Your Honor, my
13 understanding is that Dr. Longo has found,
14 through glass hole testing or otherwise, veins
15 of asbestos in certain mines.

16 THE COURT: And is there proof for which
17 mines Equate used to create its talc?

18 MS. GEIST: There will be evidence of
19 which mines Vi-Jon --

20 THE COURT: And is one of those mines a
21 mine that Longo says had asbestos in it?

22 MS. GEIST: That's correct, Your Honor.

23 THE COURT: Then that's all I need to
24 know.

25 MS. GEIST: Your Honor, can I just address

1 that point, though, because I am not aware of a
2 case, either under South Carolina precedent or
3 anywhere, that says just because there was a
4 finding of asbestos in certain areas of a mine
5 that the actual product that came out of those
6 mines was contaminated with asbestos. It's too
7 big of an evidentiary leap, Your Honor, and I'm
8 not aware of any precedential court finding,
9 ruling, that has said you don't actually have
10 to test the product.

11 THE COURT: That's not what I'm offering.
12 What I'm offering is that summary judgment is a
13 -- is a certain point in a case. And in
14 summary judgment, all inferences are looked at
15 in favor of the non-moving party, in this case,
16 the plaintiff. And if there is a scintilla of
17 evidence that will support their contention
18 that the mines that were used to create Equate
19 contain asbestos, then that's enough to get
20 them past summary judgment. Whether they're
21 going to have enough to prove it acceptably
22 enough for me to let Equate go to the jury, I
23 don't know at this time, but I'm at a very
24 preliminary stage, and they do have a little
25 bit of evidence about that.

1 MS. GEIST: And I appreciate that, Your
2 Honor, but I don't believe that that can be the
3 law going forward at this stage of the case. I
4 was thinking of an analogy, Your Honor. We
5 were thinking about this argument, thinking of
6 how I wanted to present it to the Court. And
7 it occurred to me that we often in -- you know,
8 in drug -- pharmaceutical litigation, you have
9 cases of contaminated medication, contaminated
10 pills, but it never means that you can assume
11 that every single product or pill that came out
12 of that pharmaceutical company was
13 contaminated. It's simply eliminates to a
14 batch or batches. And then, Your Honor, at the
15 end of the day, the plaintiff still needs to
16 prove that he or she ingested a pill that was
17 actually contaminated.

18 THE COURT: But here's what -- I probably
19 recited the wrong standard -- I know I did --
20 just a moment ago.

21 Scintilla is not the test. It's whether
22 there is a genuine issue of material fact. You
23 and I are debating right now this genuine issue
24 of material fact. QED. There is a genuine
25 issue of material fact, and, therefore, I'm not

1 going to grant summary judgment.

2 MS. GEIST: Your Honor, should I turn to
3 the second point? Because I think the second
4 point is, frankly, dispositive. Even if --
5 even if assuming -- let's assume, for purposes
6 of this argument, that there was asbestos found
7 in the Equate brand product. The second part
8 of our argument is that the exposure to
9 Mr. Perry does not meet the requirement --

10 THE COURT: The law passed --

11 MS. GEIST: -- under South Carolina law,
12 in the Henderson test. And, Your Honor, I
13 really, on this point --

14 THE COURT: I'm not going to make summary
15 judgment determinations. That's a huge
16 material issue of fact. It's going to depend
17 on what the experts say. This is always a
18 battle of the experts. But summary judgment
19 will not be warranted on that basis.

20 MS. GEIST: But, Your Honor, may I
21 approach, because I want to get to what the
22 expert has to say on that?

23 THE COURT: You can just tell me briefly,
24 but, see, I'm not in the business of weighing
25 the experts at this time. They're going to

1 have an expert that says one thing, and you're
2 going to have an expert that says another
3 thing. That's not what summary judgment is
4 about.

5 MS. GEIST: And, Your Honor, I agree with
6 you. And that, typically, is how cases
7 proceed. The expert for the plaintiff says one
8 thing; the expert for the defendant comes in
9 and says something, and the jury has to weigh
10 what those experts say and make a decision.
11 But here it is very rare when a plaintiff's
12 expert makes the argument for you, and that is
13 our position. Dr. Longo always does a dose
14 calculation and exposure calculation, and he
15 did it in this case.

16 And that's, Your Honor, what I would like
17 to hand up to you, if I may approach?

18 THE COURT: I'm not going to get into a
19 qualification of Longo in the connection with
20 this particular motion. We got a ways to go in
21 this hearing today. We've got a whole section
22 of it that's going to deal with whether these
23 experts can be allowed to testify. This is
24 always what happens with Longo. Frankly, it's
25 going to happen with y'all's experts, as well.

1 I've got a lot of questions in all kind of
2 ways. But, ma'am, let me just simplify this
3 thing. All of your position's completely
4 protected in your very excellent motion, your
5 brief, and your presentation, but I will deny
6 the motion on summary judgment.

7 MS. GEIST: Your Honor, just for the
8 record, can I just add one thing and then I
9 promise I will sit down?

10 THE COURT: All right.

11 MS. GEIST: All right. So you had said
12 something about you understand Dr. Longo's
13 calculation, and we all do. But in this
14 case -- this is why I'm trying to make the
15 point, Judge, because this is a different case
16 for a different company. Dr. Longo made that
17 calculation of dose, or exposure to the
18 products at issue for seven products. He could
19 not and did not make it for the Equate product
20 manufactured by Vi-Jon.

21 And when we asked him at his deposition:
22 Why didn't you do it, here on page 7 of his
23 notes that were produced before his deposition,
24 here are the dose calculations, exposure
25 calculations for seven other products, nothing

1 with the Equate brand product. And, Your
2 Honor, we asked him when he was being deposed
3 -- I think it was maybe a week ago, "Why didn't
4 you do it for Equate?" And he told us, quote,
5 I didn't really have enough information to do
6 that.

7 So it is an admission by the primary
8 expert on behalf of Mr. Perry that he could
9 not -- based on the testimony from Mr. Perry,
10 based on the evidence in the case to date, he
11 could not say how much exposure Mr. Perry had
12 with respect to the Equate product.

13 And what we know, Judge, in this case,
14 Mr. Perry never bought it. Never once; not a
15 single bottle. He never bought the product.

16 His testimony was when his spouse and he
17 would shower together and his spouse would get
18 out of the shower first and he would grab the
19 Equate, if that would happen, then he was
20 possibly also using the Equate brand product.
21 But we know from his spouse, Lonnie Long, who
22 testified last week, he said, "My spouse,
23 Mr. Perry, the plaintiff, used Johnson &
24 Johnson powder 95 percent of the time. The
25 other 5 percent are" --

1 THE COURT: Okay. I --

2 MS. GEIST: Maybe the Equate --

3 THE COURT: You made your --

4 MS. GEIST: -- products, Your Honor, but
5 how can -- how can that rise to the level of
6 what's required?

7 THE COURT: I understand. You made your
8 point.

9 MS. GEIST: Thank you, Judge.

10 THE COURT: All right. Ms. McVey.

11 MS. McVEY: Ms. Gross.

12 THE COURT: Ms. Gross.

13 MS. GROSS: Yes, Your Honor.

14 THE COURT: I mean, I want one sentence
15 here.

16 MS. GROSS: There may be two, but I'll be
17 fast, I promise.

18 So, first, of course, Mr. Perry used it on
19 himself. His husband purchased it.

20 THE COURT: I'm not worried about that.
21 All I'm concentrated on is whether there's
22 expert testimony --

23 MS. GROSS: Got it.

24 THE COURT: -- that Equate was made from
25 mines that contained asbestos.

1 MS. GROSS: Yes, ma'am. From two experts.
2 It's not just Dr. Longo. It's Mr. Bailey, as
3 well. Mr. Bailey has testified that --

4 THE COURT: Mark Bailey has testified.
5 Montana, Canada (sic), Vermont. And which mine
6 was Equate made from?

7 MS. GROSS: Equate was made during the
8 period at issue -- it was sold by Barretts. It
9 was made from Montana.

10 THE COURT: Montana. Okay. We all got
11 Montana -- testimony. That's all I need to
12 know at this time. Whether I'll let you go to
13 the jury with it is another question, but right
14 now, it's a genuine issue of material fact and
15 you got that.

16 MS. GROSS: And just for the record, it's
17 not just the money. It's actually hundreds of
18 bottles of products containing the Montana
19 talc. It could have been tested by both
20 Mr. Bailey and Dr. Longo. It's what's inside
21 of the bottle that counts. And I talked about
22 that. So just so the record's clear on that,
23 as well.

24 THE COURT: Thank you, ma'am.

25 MS. GROSS: Thank you.

1 THE COURT: All right. The motion is
2 denied.

3 All right. Plaintiffs' motion -- motions
4 in limine.

5 All right. I hope plaintiffs and
6 defendants, that there's been some kind of
7 consultation about these things --

8 MS. McVEY: Your Honor, I was wondering --

9 THE COURT: -- examination of all my old
10 rulings, because I'm probably not going to hear
11 too much on those. I want to let people
12 preserve their positions, but Plant was one of
13 the latest in a series of talc cases I tried.
14 I will say this -- and y'all can chew on this.
15 I will take a break before we start this. But
16 the main thing that I want to concentrate on is
17 the expert testimony.

18 Plant was my latest examination of all of
19 this. And I must say to you that the impact of
20 more recent examination of the big issue, which
21 is, hey, crocidolite is the terrible bad
22 asbestos, but chrysotile is the good asbestos.
23 And by the way, it has these cleavage
24 fragments. The concept being those cleavage
25 fragments can't worm their way down into the

1 areas of the lung where mesothelioma is
2 created.

3 I'm going to be looking very carefully at
4 what experts can say to all of that. I am
5 particularly concerned about, on the defense
6 side, and it's Sanchez and McCrone. That's his
7 big bailiwick, but he cannot diagnose
8 mesothelioma, nor can a lot of these experts.

9 And the big takeaway from Plant is, I did
10 not allow these non-medical experts to testify
11 about what causes mesothelioma. They can
12 testify about deposits and that kind of thing,
13 but what causes mesothelioma has got to be
14 someone that's got some qualification.

15 A lot of these experts -- well, you had
16 one, particularly in the old days, who
17 testified all around that mesothelioma -- and
18 wanted to testify mesothelioma of the plaintiff
19 in the case was idiopathic or spontaneous.

20 Idiopathic simply means we don't know what
21 caused it. Spontaneous is not any kind of
22 medical diagnosis that has stood up to more
23 recent examination of this issue of the cause
24 of mesothelioma.

25 So, I'm going to -- what I'm going to be

1 doing is looking at these experts and just give
2 you all fair warning in advance. All the rest
3 of these routine motions that I have decided a
4 thousand times, I hope we can sail through and
5 concentrate our efforts on what kind of expert
6 testimony is going to be allowed and the ambit
7 of that.

8 I rarely knock experts out totally, even
9 though each side always wants me to knock out
10 the other side's expert completely. I don't do
11 that.

12 I think these toxic tort cases are the
13 battle of the experts, but I do put some
14 scrutiny on what those experts are qualified to
15 testify about. And so that's the way I'm going
16 to be driving with some of this.

17 Ms. McVey.

18 MS. McVEY: Your Honor, I think that makes
19 sense.

20 Just for the record -- and I know we gave
21 you copies -- we filed for everybody to have
22 their pretrial hearing transcripts in Plant,
23 Jolly, and Taylor. I think it captures almost
24 every --

25 THE COURT: It does. I looked back on

1 those and made notes.

2 MS. McVEY: So if we were to take a break,
3 I think I can check with somebody and see what
4 kind of agreement we have.

5 THE COURT: That would be so nice. The
6 Omnibus ones, it looks to me like you ought to
7 be able to check off pretty easily. And then
8 we can spend some time on the ones that are
9 really the very principle position taken.

10 Okay. It is now 1:00. How much time do
11 we need? The court reporter's the one we need
12 to give real mercy.

13 MS. McVEY: We're happy to do anything you
14 want. We're here to stay here to work if you
15 want. If people want to grab a little sandwich
16 so no one gets cranky, I'm good with that.

17 THE COURT: How about 1:15 or as close
18 thereof as we can get? Does that give you
19 enough time?

20 MS. McVEY: You said 1:15?

21 THE COURT: I mean -- excuse me. 2:15.
22 2:15.

23 (A luncheon recess was taken from
24 1:00 p.m. to 2:14 p.m.)

25 (Court resumed session at 2:14 p.m.)

1 THE COURT: All right. We're on
2 plaintiffs' motions in liminé. Okay.

3 MS. McVEY: And, Your Honor, the easiest
4 thing may be to start with the plaintiffs'
5 Omnibus, and we can tell you we've agreed on
6 some and some with a few caveats that we can --

7 THE COURT: All right.

8 MS. McVEY: -- probably just walk through.

9 THE COURT: Okay.

10 MS. McVEY: If you look at Omnibus,
11 starting with the first one, collateral source,
12 we agree to that one.

13 THE COURT: Hang on. Yeah, all right.
14 What about it?

15 MS. McVEY: We've agreed.

16 THE COURT: Agreed. Okay. On 1B,
17 circumstances of informal counsel.

18 MS. McVEY: Your Honor, my understanding
19 is we agreed to that one, as well.

20 MS. BUENO: Agreed.

21 THE COURT: All right. 1C, exposure to
22 substances other than talc or asbestos.

23 Ms. McVey?

24 MS. McVEY: We agreed to that one.

25 THE COURT: All right. Motion in liminé

1 1D, reference to or evidence of Dr. Longo's
2 address -- arrest.

3 MS. McVEY: Agreed.

4 THE COURT: Very good. All right.

5 Dr. Longo and the confederate flag.

6 MS. McVEY: Agreed.

7 THE COURT: Suggestion that defendants are
8 not held to the standards of an expert.

9 MS. McVEY: We agreed.

10 MS. BUENO: Agreed. Your Honor, we agreed
11 to follow the pattern instructions here that
12 Your Honor has given. We stand on our briefing
13 on other explanation.

14 THE COURT: Yeah. Well, y'all know what
15 my instructions are and that's what I'm going
16 to do.

17 1G, suggestion that the plaintiffs are
18 held to the standard of an expert.

19 MS. McVEY: We agree.

20 THE COURT: All right. Past or future
21 compromise settlement resolutions.

22 MS. McVEY: We agreed.

23 MS. BUENO: We agree with the caveat that
24 -- that the actual nexus of their motion kind
25 of bled over into our defendants' motion in

1 liminé number 9, about publishing parts of the
2 complaint.

3 THE COURT: Yeah. You know that I'm not
4 going to do that, so I understand you reserve
5 your right to argue that, with Smith versus
6 Tiffany and Mason versus Carasi (ph). Okay.

7 1H, past or future compromise resolutions.
8 Agreed. And statements by the courts.

9 MS. BUENO: We agree, Your Honor, as it
10 relates to witnesses that are in this trial.
11 If there are orders related to witnesses that
12 come up during examination of other experts, we
13 agree to approach before using those.

14 THE COURT: Yeah. I never allow it in
15 evidence. You can argue that as a piece of
16 support for whatever position you're taking in
17 legal arguments made, but I never allow that
18 kind of thing in evidence before the jury. So
19 just so you know.

20 MS. BUENO: Thank you.

21 THE COURT: All right. Motion in liminé
22 1J.

23 MS. McVEY: Your Honor, I think we need to
24 argue this one. This is --

25 THE COURT: All right. You go forward.

1 MS. McVEY: Thank you, Your Honor.

2 This really has to do with preventing
3 Johnson & Johnson, or Vi-Jon, but particularly
4 Johnson & Johnson, to come in and say, "This
5 company has always acted ethically. We've
6 always done the right thing by customers." And
7 if they're going to say that, then we believe
8 it opens the door to a lot of other bad stuff
9 that Johnson & Johnson's done, not just as it
10 relates to talc.

11 And we give you some examples in our
12 briefing, but, you know, that they were sued by
13 DOJ for illegal marketing of Risperdal; that
14 they've been subject to congressional
15 investigation. All of that stuff that would
16 not necessarily come in unless they were having
17 people vouch for what a great, safe, ethical
18 company Johnson & Johnson is. That's what
19 we're seeking to prevent.

20 THE COURT: All right. Counsel.

21 MS. PEPKE: Thank you, Your Honor.

22 We just wanted to be clear on this. We
23 agree that we're not going to vouch or bolster
24 as that is defined under South Carolina law.
25 We're not going to vouch for the credibility.

1 We personally believe in a witness or our
2 witnesses believe --

3 THE COURT: Well, if you specifically
4 address "We've always been ethical on this sort
5 of thing," you say that, you're going to open
6 the door.

7 MS. PEPKE: Agree, Your Honor, but we also
8 need to rebut anything that plaintiffs put on
9 in their case. They get up and --

10 THE COURT: Oh, sauce for the goose is
11 sauce for the gander. If they open the door,
12 it's always out there. So if they open the
13 door, then we'll talk about it.

14 MS. PEPKE: Okay. Thank you, Your Honor.

15 THE COURT: You're not precluded from
16 arguing, if they open the door, but I have
17 never seen it happen that it went that far with
18 any of the cases I've had.

19 MS. PEPKE: Thank you, Your Honor.

20 THE COURT: All right. Ms. McVey, so, all
21 right, we understand each other on vouching and
22 bolstering. We'll grant that.

23 Insincere use of apologies and other
24 similar unprofessional behavior.

25 What do you mean by that?

1 MS. McVEY: Here's what we mean. If --
2 what I want to avoid happening is that Johnson
3 & Johnson's lawyer goes up to Mr. Perry and
4 says, "We're just so sorry that you have this
5 mesothelioma." It just puts him in a very
6 awkward position in front of the jury. If they
7 want to apologize to him sitting at the table,
8 privately, I think that's totally valid if they
9 feel that way, personally. But just putting it
10 in front of the jury just feels like what is
11 Mr. Perry supposed to do with all that?
12 "That's okay. Don't worry about it." I just
13 think that doesn't need to be done in front of
14 a jury.

15 THE COURT: All right. Counsel.

16 MS. PEPKE: Your Honor, I was actually
17 surprised to find case law on this, but it is
18 completely appropriate for the defendants to
19 appropriately and in a limited fashion to
20 acknowledge Mr. Perry's unfortunate diagnosis.

21 THE COURT: Yes. She's talking about
22 something a little different, as I understand
23 it. Ms. McVey, listen to me on this.

24 MS. McVEY: I'm sorry.

25 THE COURT: What she's saying is she's

1 trying to prevent you from going up to the
2 plaintiff, or the plaintiff's husband, and
3 saying, "We're so sorry you're dying of
4 mesothelioma."

5 If in the -- in the course of the
6 testimony of your witness they say, "Our heart
7 goes out to Perry," or something of that
8 nature, you know, "you're suffering" or
9 something like that, that's often done. It
10 needs to be done with a dead pan (ph), I'm sure
11 y'all went through it that way. That, I have
12 no problem with. And I'll point Ms. McVey to,
13 she wants to avoid that awkward position of
14 putting this plaintiff and the plaintiff's
15 husband in the position of having to directly
16 confront that with them. You say you're not
17 going to do that, so I think we've resolved it.

18 MS. PEPKE: Well, I just want to be clear.
19 We have in the past, counsel, when, you know,
20 plaintiff takes the stand, perhaps a limited
21 acknowledgment that --

22 THE COURT: I will grant her motion, if
23 that's what you're going to do, because I'm not
24 going to let you put the plaintiff -- they're
25 emotional enough as it is. I'm not going to

1 put them in the awkward spot of having to say,
2 "Well, thank you so much for telling me how
3 sorry you are that I'm about to die." Just
4 don't do that.

5 MS. PEPKE: Understood, Your Honor.

6 THE COURT: But if your witness wants to
7 testify along those lines, you know, a brief
8 sort of thing, just representing Johnson &
9 Johnson, I don't have any problem with.

10 MS. PEPKE: We understand that. Thank
11 you.

12 THE COURT: All right. Very good. So
13 granted, with the limitations we've discussed.

14 All right. Mention of Clubman talc on
15 American International Industries.

16 MS. BUENO: Your Honor, this motion is
17 written very broadly. I think we've talked and
18 we have an understanding about what we are and
19 are not going to do regarding Clubman talc,
20 speaking on behalf of J&J defendants.

21 We understand that Clubman is in default.
22 And let me just be clear. It's defendant's
23 position that cosmetic talc did not cause
24 Mr. Perry's mesothelioma. So the last thing
25 we're going to do --

1 THE COURT: I know that's your position.

2 MS. BUENO: But it's relevant here, Your
3 Honor, because we're not going to point the
4 finger at Clubman talc.

5 THE COURT: You don't get to take up
6 Clubman talc, either, is what she's saying.

7 MS. BUENO: Correct. But what this motion
8 filed by plaintiff seeks to do so is to
9 eliminate any reference of it. All I want to
10 make sure we have the ability to do, as
11 defendants, is give the jury an accurate
12 portrait of Mr. Perry's talc use over time.
13 How many bottles of Johnson & Johnson talc he
14 said he used; how many bottles of Clubman,
15 Equate, and all the others. There's many, many
16 different talcs.

17 So we opposed this motion, which was any
18 mention of Clubman talc. And we opposed it
19 because --

20 THE COURT: Here's what she's trying to
21 avoid. And let me see if I can get some peace
22 going here. These people are in default. They
23 don't have the ability to say a darn thing.
24 They're in default, therefore, they're liable.
25 Their talc caused his injury. Period. So

1 Clubman is off base and American International
2 is off base to you.

3 On the other hand, you can't blame it all
4 on Clubman just because they're in default.

5 MS. BUENO: Understood. The only thing
6 that we seek to do, and the only evidence we'll
7 offer is to be able to talk to Mr. Perry about
8 his use over time to avoid the false impression
9 that Johnson's baby powder was the only talc he
10 was using.

11 THE COURT: That's legit.

12 MS. BUENO: Thank you.

13 THE COURT: All right. It's granted, with
14 the limitations that have been expressed.

15 Motion in limine 1M, exclude mention of
16 Long's previous lawsuits that are unrelated to
17 Michael Perry.

18 MS. McVEY: I think we agree on this. He
19 had a prior worker's compensation claim that we
20 just wanted to keep --

21 THE COURT: Well, I'll grant that.

22 Number 1N, exclude information in Michael
23 Perry's medical records unrelated to his cancer
24 diagnosis, specifically, Michael Perry's sexual
25 history.

1 MS. McVEY: Your Honor, there are some
2 comments in the records talking about sexual
3 history or sexual partners. And we don't think
4 that's probative of any issue here. And when
5 we were discussing it with Ms. Bueno, you know,
6 she made the comment if he's not going to
7 testify that "I've always been faithful or we
8 have a perfect marriage," then she won't use
9 those records. And if that's the deal, then I
10 think we're good.

11 THE COURT: Well, I wouldn't let that
12 happen if they were a man and a woman that's
13 married. I'm not going to let you get into
14 anybody's sexual history, don't care what. So
15 let me tell you that's off base. If they --
16 they will describe their marriage as a loving
17 marriage. And you don't get to refute that by
18 talking about his sexual history.

19 I'd say the same thing if it were
20 Mrs. Perry. Just because Mr. Perry will say
21 "Mrs. Perry and I have this long, loving
22 relationship," I don't let people bring up,
23 well, she's, he, "she's strayed a little bit on
24 him, didn't she?" That's not going to happen.

25 MS. BUENO: Understood, Your Honor. And

1 just so we're very clear about what the records
2 are here, this motion is very broad, as you
3 see. It seeks to exclude any evidence outside
4 of his cancer diagnosis that comes --

5 THE COURT: Yes, ma'am. And I'm going to
6 grant that motion.

7 MS. BUENO: And here's the concern: There
8 is a loss of consortium claim. And the sexual
9 history portion aside, there are discussions
10 about separation and divorce and issues in the
11 marriage that are appropriate when you have a
12 loss of consortium claim. Those are things
13 that should be fair game, depending on the
14 testimony. I do not intend to bring those in
15 affirmatively. But if there is --

16 THE COURT: They're going to testify they
17 have a loving relationship. Just count on
18 that. I am not going to allow you to get into
19 the problems with the marriage. I have never
20 allowed that in a loss of consortium case and,
21 frankly, most people are pretty sensitive to
22 just not getting into that, one way or another.
23 But I will tell you, if it comes to that, I
24 will not allow you to introduce any evidence of
25 the problems in the marriage or the sexual

1 history or anything like that.

2 MS. BUENO: Understood. And with that
3 understanding, Your Honor, as it relates to the
4 marriage and the sexual history, we ask for
5 your ruling on this motion to be limited to
6 that because it is broader. It's seeking to
7 exclude anything in the medical records outside
8 of his cancer diagnosis. There are other
9 things --

10 THE COURT: Well, what other things are we
11 talking about?

12 MS. BUENO: Well, for example, he had
13 prior accidents that affected quality of life
14 and caused -- he has mental health issues. I
15 don't know. The point is, depending on what
16 evidence comes --

17 THE COURT: I'm not going to -- I am very
18 unlikely to allow any of those things in.
19 We're talking about mesothelioma, which he got,
20 and what happened as a result of the
21 mesothelioma. His other medical history is not
22 pertinent as to whether it caused him to get
23 mesothelioma.

24 MS. BUENO: Understood. But we do have
25 claims by the plaintiffs about different

1 damages over time.

2 THE COURT: You'll have to prove it's
3 damages related to mesothelioma. You can't
4 undercut them by showing he had damages in
5 other things. I've never allowed that.

6 MS. BUENO: Understood. There's also
7 medical records about family history and other
8 issues for -- for a long period of time,
9 including mesothelioma.

10 THE COURT: I don't let that kind of stuff
11 in. Let me tell you, this case is all about
12 his mesothelioma; what caused it; what he has
13 suffered as a result of it. I will not allow
14 the material in.

15 MS. BUENO: Understood.

16 THE COURT: And your position on that is
17 preserved for later use. (sic)

18 MS. BUENO: Thank you. And to the extent
19 there is a medical record that is outside of
20 his cancer diagnosis that we wish to offer, I
21 will raise that with the Court in advance.

22 THE COURT: Certainly.

23 All right. Granted, with the caveats I
24 have put on it.

25 All right. That's the -- that's the --

1 that's the Omnibus; am I right?

2 MS. McVEY: Yes, ma'am.

3 THE COURT: Ms. McVey, so we come down to
4 number 2. This is plaintiffs motion in liminé
5 number 2: Misleading statements about the
6 FDA's regulatory authority and statements that
7 the talc is generally regarded as safe.

8 MS. McVEY: So, Your Honor, we discussed
9 this.

10 Johnson & Johnson agrees not to use that
11 graph that they made; generally regarded as
12 safe. I think they've agreed not to do that.

13 Where we really have a strong disagreement
14 is FDA's authority. And, as you know, you've
15 tried these cases now a bunch of times. The
16 FDA does not have -- we want to prevent them
17 from arguing that the FDA has approved talc or
18 found any level of asbestos to be safe in talc.
19 We want to make clear that the FDA authority
20 does not include -- let me say that backwards.

21 Talc can be sold without the FDA ever
22 approving it, right --

23 THE COURT: Right.

24 MS. McVEY: -- or testing it or any of
25 that stuff; that the FDA does not have ability

1 to issue a recall for talc. They can put
2 public safety out there. The only thing that
3 they can regulate -- and it's on their website
4 and you've heard it -- is its color additives.

5 So by allowing them to kind of wiggle room
6 with the FDA and suggest how the FDA approved
7 talc in products and said it was safe is what
8 we're trying to prevent them from doing.

9 THE COURT: Well, let me say a couple of
10 things about that.

11 Kind of going at it backwards. For years
12 it's been the good asbestos, and the bad
13 asbestos. Now, the FDA has put a kibosh on
14 chrysotile, crocidolite, amosite, tremolite and
15 all of them. And the very latest with what
16 they did with chrysotile. So, you know, you
17 don't --

18 MS. McVEY: That's the EPA.

19 THE COURT: I mean, that's the EPA, right.

20 MS. McVEY: So this is FDA and what I just
21 don't want them to do is say, "Look, the FDA
22 said this talc was safe and that if we let it
23 be sold, then whatever asbestos was in there is
24 perfectly fine." The FDA has no authority,
25 other than color additives, to regulate this

1 talc.

2 THE COURT: I agree.

3 MS. BUENO: Your Honor, so the motion, as
4 it's written, asks us not to argue that talc
5 has to be approved by the FDA. We know that.
6 That is not our argument. But as outlined in
7 our response brief, the FDA does have authority
8 to monitor cosmetic products. We outline that
9 with screen-shots from the FDA website that
10 talks about exactly what the FDA has authority
11 to do. And to the extent that evidence comes
12 in, it will be related, specifically, to what
13 the FDA can and cannot do.

14 THE COURT: How's that pertinent to this
15 case?

16 MS. BUENO: This is how it's pertinent:
17 Because one of the things the FDA does have the
18 ability to do is put a warning label on things.
19 And as Your Honor's well aware -- and we'll
20 talk about it later this afternoon -- there was
21 a citizen's petition, a variety of them, but
22 the one at issue asks the FDA to put a warning
23 label for asbestos on cosmetic talc. There was
24 a response letter saying, "We don't think
25 that's appropriate." That is evidence.

1 THE COURT: Well, if we're going to get
2 into that, we're going to impeach the CFTA and
3 all the shenanigans they went through to hide
4 the ball from the public to pressure the
5 governmental entities not to put -- to put out
6 the warnings they wanted to put out. I mean,
7 that's a slippery slope.

8 MS. BUENO: Well, I disagree, Your Honor,
9 with that characterization. I don't think that
10 what you just said is going to be in evidence,
11 because I don't think it's factual, but you are
12 correct that I am sure the plaintiffs will seek
13 to offer such evidence. But the evidence --

14 THE COURT: -- offered it before in cases
15 I've tried.

16 MS. BUENO: As defendants have offered
17 evidence about the FDA citizen's petitions and
18 responses and the like.

19 THE COURT: I'm not going to spend this
20 very limited amount of time we have with this
21 trial, and we talked about how long this trial
22 is going to be after awhile, but I'm not going
23 to spend it having a back and forth and back
24 and forth about the FDA and all that kind of
25 thing. EPA is something that is a little bit

1 more to the point, because they do regulate.

2 FDA does very little by way of
3 regulations. And, therefore, I'm not going to
4 get into a whole bunch of excitement. All the
5 FDA did was to say that if it's added to food,
6 it is generally regarded as safe.

7 MS. BUENO: That's not something that
8 we're seeking to offer. What we're seeking to
9 offer is a variety of evidence coming in at
10 every trial about what the FDA has done
11 regarding cosmetic talc.

12 THE COURT: Yeah, but the point of that is
13 to say, "Hey, we were well within what they
14 did," and so forth. The FDA didn't do anything
15 that said, "Hey, it's okay to put asbestos in
16 your talc."

17 MS. BUENO: Absolutely not. But the FDA
18 did testing in 1976. They considered a
19 citizen's petition in 1986. They held a talc
20 symposium in 1994.

21 THE COURT: So what -- what does that have
22 to do with this case?

23 MS. BUENO: Well, because they're going to
24 be offering evidence of state-of-the-art, what
25 was commonly known by the cosmetic industry.

1 (sic) That's all part of it. The FDA was
2 having symposia, where they were inviting
3 industry and they were inviting others to have
4 these conversations. That is evidence that's
5 relevant to deal with plaintiffs' claims that
6 J&J was doing something wrong. If they're
7 going to offer state-of-the-art evidence, what
8 the FDA was doing, testing, finding --

9 THE COURT: But what authority did they
10 have to do much of anything?

11 MS. BUENO: Well, you know what, they can
12 look at our brief, our response brief to this
13 motion. It's on page 3. There is a list of
14 exactly what the FDA has authority to do. It's
15 on the website now, and it's been consistent
16 over time. And the FDA says in the title on
17 this --

18 THE COURT: You can say it all day. I can
19 rule on every one of these things without
20 having to hear any arguments. I'm not going to
21 go back and forth all day long on this thing.

22 MS. BUENO: Understood. But the FDA --
23 look, I think we're at a closer agreement than
24 Your Honor thinks.

25 MS. McVEY: I think this will help. We

1 are not seeking to prevent you from using the
2 FDA testing. Right? We're just talking about
3 something different.

4 What we're talking about is that you can't
5 come in and say the FDA had authority to
6 regulate this talc or said the talc was safe,
7 because they didn't.

8 MS. BUENO: We are not going to say that
9 the FDA had the authority to recall; that the
10 FDA --

11 THE COURT: She's asking a specific
12 question. She's asking whether you're going to
13 say that the FDA had the authority to say talc
14 is safe.

15 MS. McVEY: And, therefore, it's salable.

16 THE COURT: And, therefore, it's okay to
17 sell.

18 MS. BUENO: I don't think the FDA has ever
19 said that.

20 THE COURT: But I don't want you to be
21 saying it at trial.

22 MS. BUENO: Well, what we're going to be
23 saying is what the FDA did. They tested it in
24 1976; here were their findings.

25 THE COURT: Yeah, you're going to say that

1 means it's safe.

2 MS. BUENO: No, I'm not going to say that
3 means it's safe. I'm going to say that's what
4 they found at that time. This is what they
5 said when they said, "We do not need a warning
6 label."

7 THE COURT: Right.

8 MS. BUENO: This is not a health hazard.

9 THE COURT: Then we're going to have to
10 get into a thing of why the testing that they
11 did was wrong, how it was influenced very much
12 by the cosmetic, talc, fragrance association
13 and all that other thing. I'm not going to
14 have a trial within a trial about something
15 this minor.

16 MS. BUENO: Okay. So this is not minor,
17 Your Honor, from defendant's perspective.

18 What the FDA was doing at the time that
19 the plaintiffs' accused us of the fraudulent
20 behavior, that is very significant; what the
21 FDA was doing to test; what the FDA was doing
22 to pull the industry together and have
23 conversations.

24 THE COURT: Okay. I -- I understand your
25 position. Ms. McVey.

1 MS. McVEY: Your Honor, it's a really
2 simple motion. All we're asking to do is
3 acknowledge that the FDA did not have the
4 authority to either issue any kind of recalls,
5 or regulate this talc, what asbestos goes in
6 talc; that it never said that talc was safe
7 with asbestos in it.

8 What they're going to do is they're going
9 to say the FDA did this and did that, and use
10 it for causation purposes, as if that has
11 anything to do with causation.

12 THE COURT: The way this thing is headed,
13 it talks about the FDA having limited power
14 over cosmetic product safety. And that is,
15 essentially, what this motion has addressed; am
16 I right?

17 MS. McVEY: That's right.

18 THE COURT: And so what you're asking is
19 that they be precluded from making misleading
20 statements about the FDA's regulatory authority
21 over cosmetic talcs or irrelevant arguments
22 that the FDA has declared talc to be GRAS. All
23 right. We solved GRAS. So you don't need
24 that.

25 But I am going to grant the motion that

1 the defendants be precluded from making
2 misleading statements about the FDA's
3 regulatory authority over cosmetic talcs. They
4 don't have any pre-market approval, sharing of
5 safety data on any of that other situation.
6 The fact that they did not put a warning label
7 on, to me, that's proof by the negative. I'm
8 not going to allow that.

9 MS. McVEY: Thank you, Your Honor.

10 THE COURT: All right. Where are we now?
11 Number 3. To Preclude Evidence About Talc
12 Pleurodesis.

13 MS. GROSS: Yes. So, Your Honor --

14 THE COURT: This is about sticking talc
15 inside somebody's lungs.

16 MS. GROSS: That's exactly it. It just
17 causes the one time --

18 THE COURT: Are you all in agreement about
19 this?

20 MS. GROSS: No. I don't think they wanted
21 to argue it.

22 THE COURT: Oh, okay. Well, I understand
23 you don't -- you don't want them to go into it,
24 but the one thing about pleurodesis is you
25 don't -- it specifically does not encompass

1 using talc that has asbestos in it, right?

2 MS. GROSS: Well, it, specifically, calls
3 for some pharmaceutical talc, but the bigger
4 picture is they want to use the fact that some
5 physicians still do this procedure where they
6 inject it once to cause a scarring reaction
7 when someone is already sick as evidence that
8 talc, in general, is safe.

9 THE COURT: Yeah. I understand it.

10 MS. GROSS: Yes. Okay.

11 THE COURT: Okay. Counsel.

12 MR. COWAN: Thank you, Your Honor.

13 Christopher Cowan, C-O-W-A-N.

14 It's nice to be in this courtroom. I've
15 never been here before. So, thank you.

16 I've heard you say two things, Your Honor:
17 One was that talc pleurodesis uses talc that
18 doesn't have asbestos.

19 THE COURT: Asbestos-free. That's what I
20 understand the procedure to be.

21 MR. COWAN: Well, not according to
22 plaintiffs' expert. So Dr. Longo has tested
23 talc that's used in talc pleurodesis and has
24 found exactly, according to Dr. Longo, the same
25 asbestos amount that is used and that he says

1 is in Johnson's baby powder. He found that
2 .001 percent to 2.002 percent asbestos in talc
3 pleurodesis --

4 THE COURT: So what? What is the
5 relevancy of this talc pleurodesis?

6 MR. COWAN: And I heard you say the other
7 thing was that -- I heard plaintiffs' counsel
8 say some doctors use it, right, and --

9 THE COURT: What's the pertinence of that
10 to whether Johnson & Johnson's baby powder had
11 asbestos that caused this problem?

12 MR. COWAN: So, if the amount of asbestos
13 -- assuming plaintiffs' experts are correct,
14 and the amount of asbestos in that talc that's
15 used in pleurodesis, it's the same as it is in
16 Johnson's baby powder. Okay. Let's just
17 assume that's true. Assume plaintiffs are
18 right. Then what has been going on for the
19 last 30- to 40 years is a human trial with talc
20 that contains a very small, ultra-trace amount
21 of asbestos.

22 THE COURT: So what? What does that have
23 to do with Johnson & Johnson's liability in
24 this case?

25 MR. COWAN: Because they are going to

1 argue that Johnson & Johnson has never
2 conducted any tests, and no tests are out there
3 for Johnson's Baby Powder or Johnson's talc.

4 THE COURT: What is the relevance of talc
5 pleurodesis with other doctors and so forth in
6 the 40-year history of using it to what Johnson
7 & Johnson's doing with its talc?

8 MR. COWAN: Because if plaintiffs' experts
9 are correct and the amount of asbestos in that
10 talc is the same as what they say is in
11 Johnson's Baby Powder, then there is a dose
12 problem and a causation problem for plaintiffs'
13 case.

14 THE COURT: I don't see that -- I mean, I
15 can't connect those dots. I don't see that.

16 MR. COWAN: I understand, Your Honor, and
17 I would just state one more thing: It's not
18 just some doctor. Dr. Gibney, who is
19 plaintiffs' thoracic surgeon, was deposed in
20 this case. They have subpoenaed him for trial.
21 He has -- and his colleagues routinely conduct
22 talc pleurodesis operations, and they are
23 unaware of any connection between that
24 procedure, which apparently, according to their
25 experts, has the exact same amount of asbestos

1 in it. They're unaware of that ever having
2 caused mesothelioma. That's -- that's the
3 point.

4 THE COURT: I am granting this motion.

5 MR. COWAN: Okay. Thank you, Your Honor.

6 THE COURT: Okay. Number 4, plaintiffs'
7 motion in liminé, precluding reference to or
8 introducing complaint, full caption, or settled
9 or dismissed defendants. All right. This is
10 Smith versus Tiffany; Mason versus Carasi.

11 Yes, ma'am. Ms. McVey. You're citing
12 those cases for the proposition that you can't
13 do this.

14 MS. McVEY: And you --

15 THE COURT: I ruled that every way in
16 every case I tried.

17 MS. PEPKE: And, Your Honor, this is the
18 part I want to clarify, and I have spent a lot
19 of time with Smith versus Tiffany and, also,
20 Edwards versus --

21 THE COURT: You can't imagine how much
22 time I've spent.

23 MS. PEPKE: You got me beat by a mile. I
24 have no doubt. And I've also read Your Honor's
25 prior rulings on this. And my -- I'm troubled

1 squaring the cases with 43G -- 43G on this
2 point.

3 I understand Your Honor's rulings about
4 the caption of the case. And what I think
5 you've said before is the defendants can't say
6 there were 40 defendants when this case started
7 and 38 have settled. But what we can say is we
8 think that there are 38 other corporations that
9 the evidence shows contributed to the
10 plaintiffs' injury. And what we want to say is
11 -- and plaintiffs said that, too. And we want
12 to do that in this case, because in the
13 complaint, he has paragraph allegations within
14 the body --

15 THE COURT: Here's what Smith versus
16 Tiffany and Mason versus Carasi say: The cases
17 of this type, because of the provisions of the
18 South Carolina Contribution Among the Joint
19 Tortfeasors Act, we don't allow you to refer to
20 other non-defendants on a potential
21 contribution to this case.

22 The case is tried on the basis of the
23 defendants that are in the case. And if a
24 verdict is rendered, then post-trial, the judge
25 allocates responsibility and allocates

1 contributions made by settling parties.

2 That is how the Legislature chose to set
3 this up, and that is how the South Carolina
4 Supreme Court ruled on this matter about what
5 can be said about non-present defendants,
6 defendants that settle, defendants who were in
7 the caption but are no longer. You can only
8 talk about those people that are in the case.
9 There's one exception to that, and one
10 exception, only. And that is the empty chair.
11 And the empty chair works like this:

12 You got to be able to show that the empty
13 chair is completely responsible for this,
14 despite all the badness I may have done; that
15 the intervening badness of the absent
16 defendant, the empty chair, is the cause of
17 plaintiff's injury.

18 That can't be shown in this case. I have
19 not seen a case in which it's been done. I
20 have had a couple of -- maybe one or two
21 defendants the whole time I've been doing this,
22 who tried the empty chair. Blew up in their
23 face.

24 But y'all are not trying this on the basis
25 of the empty chair. You are wanting to get

1 these captions in and everything to try to
2 suggest to the jury, "Well, we all bear some
3 responsibility in this, so keep in mind, cut
4 down what you would otherwise look to us for
5 because there's some other badness going on
6 here."

7 The Supreme Court has said that the
8 General Assembly cut that out when they passed
9 this Contributions Among Joint Tortfeasors.
10 And we may all have some concept about whether
11 that's the best way to do it.

12 That may work in wreck cases, but it
13 doesn't work in these sophisticated types of
14 tort.

15 I don't get to decide that, nor does the
16 Supreme Court. We've got to go by what the
17 Legislature put in this law.

18 South Carolina Supreme Courts interpret
19 it. I'm going to follow it. And, therefore,
20 you're not going to be able to get into any of
21 that.

22 MS. PEPKE: I agree, Your Honor. We have
23 preserved our objections. And I have read
24 Smith versus Tiffany very, very clearly on that
25 point. And my argument here is just a little

1 more nuanced.

2 The allegations in the complaint -- and
3 I'm going to read, like, the Court an example
4 of what I'm speaking about. Aren't even
5 directed at a certain defendant. This is how
6 we -- this is why Smith versus Tiffany is not
7 quite on point.

8 For example, plaintiff alleges in its
9 complaint, paragraph 11, that he was exposed to
10 asbestos-containing products at various times
11 throughout his life from non-occupational work
12 maintaining vehicles working on bricks.

13 We should be allowed, under 4 -- under
14 South Carolina Rule of Civil --

15 THE COURT: And what would be the end of
16 that? It's to shift the responsibility to
17 somebody else who's not in the case. We don't
18 do that in this state because of the
19 Contributions Among Joint Tortfeasors. So I
20 don't care what they say in the complaint.
21 That's not the basis for allowing an absent
22 defendant to be put into the middle of this
23 case.

24 MS. PEPKE: But, Your Honor, wouldn't it
25 be a basis if we can make it -- if we can get

1 there -- now, we have the burden to get there,
2 but wouldn't it be part of the dots that we
3 would connect for an empty chair --

4 THE COURT: You're just not going to be
5 able to connect those dots by putting in the
6 complaint. You're not going to be able to
7 connect those dots by just kind of having some
8 kind of general reference to this other thing.

9 If you have hard evidence that shows not
10 just that there was some bricks involved and
11 other things, but that despite all your
12 conduct, this, and this alone, would supersede
13 and intervene and cause an injury, then we
14 would look at that. But right now, I don't see
15 anything on the horizon like that, and,
16 therefore, I am not going to allow -- what you
17 asked for is a complaint full caption or a
18 settlement to dismiss the defendants. That's
19 what you asked for. Not going to allow the
20 complaint. Not going to allow this, the
21 settlement to dismiss the defendants for the
22 reasons I have stated.

23 MS. PEPKE: Thank you, Your Honor.

24 THE COURT: All right. Five: Plaintiffs'
25 motion in limine 5 to preclude defendants'

1 counsel and witnesses from making disparaging
2 remarks about the plaintiffs' counsel.

3 MS. McVEY: And, Your Honor, we have
4 largely agreed on that. This is just to
5 prevent anybody from saying that the talc
6 litigation is a plaintiff's attorney creation;
7 that we run out of people to sue and so we
8 started suing these talc defendants.

9 And I think, according to defendant, that
10 they're not going to do that.

11 THE COURT: There's no defense that is
12 going to be participating in any way by Mr.
13 Brown to allow any of that. So I'm completely
14 comfortable about that, and I caution you the
15 same way, Ms. McVey, that you can't disparage
16 them.

17 MS. McVEY: Agreed.

18 THE COURT: All right. Six, plaintiffs'
19 motion in limine to exclude evidence or
20 arguments related to Betty Bell related to
21 against American International Industries or to
22 any other individuals who were the subjects of
23 peer reviewed scientific studies.

24 Ms. McVey, or Ms. Gross.

25 MS. GROSS: This is one that we argued in

1 the Payne and Plant case last year, and you
2 granted pretty quickly without issue. You
3 said, "We're not going to have a trial within a
4 trial." I think they might want to argue it.
5 That's what I have in my notes, so...

6 THE COURT: This is the settlement
7 meetings of the workers' comp claims?

8 MS. GROSS: Yes. This is all part and
9 it's actually kind of lumped in with the next
10 MIL, which is trying to keep out evidence of
11 J&J suing the authors of those --

12 THE COURT: Yeah, I got you.

13 MS. BUENO: And the only thing I wanted to
14 mention is it's also wrapped in with Johnson &
15 Johnson's motion number 12. So we sought to
16 exclude, in their entirety, the two articles.
17 Actually, there was three articles: Two by
18 Dr. Moline and one by Dr. Emery that formed the
19 basis of these others.

20 My understanding is Your Honor has ruled
21 on that in the past and denied our --

22 THE COURT: Yeah. Let me just -- those
23 are reliance materials and there's sometimes an
24 examination that's made about reliance
25 materials, but I am not going to allow any

1 introduction of arguments, documents of
2 evidence on this workers' comp claim at
3 settlement meetings. I'm not going to allow
4 that.

5 MS. BUENO: Well, then I think that we
6 have then your rulings on plaintiffs' motion in
7 liminé 6 and 7. We are not opposing motion in
8 liminé number 7. So that one's agreed.

9 THE COURT: All right.

10 MS. BUENO: On number 6, then, I hear you
11 granting; is that correct, Your Honor?

12 THE COURT: What's that?

13 MS. BUENO: You just granted motion in
14 liminé --

15 THE COURT: I granted 6; that's correct.
16 And 7, I'll also grant.

17 MS. BUENO: Yes; 7 was agreed, Your Honor.

18 THE COURT: Yes. So we've got 8, exclude
19 arguments that workplace asbestos exposure
20 standards are proxy for "safe." All right.

21 MR. ADAMS: Yes, Your Honor. Ben Adams.
22 Good to see you, again. I was in the Glenn
23 trial. Thanks for having me here again.

24 The lawyers for Johnson & Johnson, they
25 sometimes bring an expert who says, "Well, if

1 you add up the exposure from Johnson's Baby
2 Powder, it would be below the OSHA workplace
3 exposure limits."

4 So the exposures from our product, if you
5 added them up, it would be below the OSHA
6 permissible exposure limits, and, therefore, it
7 must be safe. That's the argument that Johnson
8 & Johnson will make.

9 The problem is that the OSHA permissible
10 exposure levels have never been safe for the
11 disease mesothelioma. OSHA says that
12 themselves. That's number 1.

13 So OSHA says these levels, these
14 permissible exposure levels for in the
15 workplace, they're not safe for the disease of
16 mesothelioma. And so this -- this testimony
17 from the defendants' expert is unreliable
18 because OSHA, itself, in the very regulations
19 says these levels are not safe for the disease
20 mesothelioma.

21 It's also attenuated under 403, because
22 Mr. Perry never used talc as part of a
23 workplace exposure. He only -- it's only part
24 of his personal use. So Mr. Perry, he wasn't
25 occupationally exposed to industrial talc, you

1 know, in a factory or something. He only used
2 talc as part of his personal use.

3 So OSHA doesn't even apply, because he
4 wasn't exposed in the workplace. It was just
5 his personal use.

6 So for those two reasons, we believe the
7 Court should preclude argument or reference to
8 the OSHA permissible levels as evidence that
9 their talc powders were safe.

10 THE COURT: Okay. All right. Mr. Cowan.

11 MR. COWAN: Yes, Your Honor. I think
12 we're talking past each other, because I -- I
13 don't think that anybody is going to come in
14 and say the OSHA permissible exposure level,
15 .1 fibers per cc, is safe.

16 The fact that the OSHA permissible
17 exposure levels is .1 fibers per cc, however,
18 is incredibly relevant, because, number 1, the
19 plaintiffs' experts have actually injected this
20 issue into the case. They are relying on
21 studies, exposure studies that literally talk
22 about the .1 fibers per cc OSHA PEL. And, in
23 fact, one of the exposure consumer studies that
24 Dr. Longo is relying on, one of only four,
25 expressly compares their finding to the OSHA

1 PEL of .1 fibers per cc. That exposure study
2 did not say that .1 fibers per cc was safe, but
3 it did note that the hypothetical exposure to
4 asbestos and talc, assuming a sub-trace level,
5 would be a 107,000 times lower than .1 fibers
6 per cc.

7 THE COURT: Well, what is it you want to
8 tell the jury about .1 --

9 MR. COWAN: So, here's the point:

10 Number 1, I have to be able to
11 cross-examine Dr. Longo on OSHA, because it's
12 in the study that he is relying on, and he's
13 actually stating that the study itself -- and
14 the only way that I --

15 THE COURT: I will tell you, I will get
16 him -- I will tell you how we go about experts
17 in this court. I'm not having trials within a
18 trial, where we spend all our time talking
19 about reliance documents.

20 MR. COWAN: It's not going to be that,
21 sir -- or, ma'am, I'm sorry. It's not going to
22 be about going through a trial within a trial
23 of reliance materials. It really is about the
24 substance of his opinion, because it's --

25 THE COURT: But I allow these experts to

1 be cross-examined about the substance of their
2 opinion, and I don't allow experts to testify
3 about things that are outside their ability to
4 have an opinion about.

5 MR. COWAN: Absolutely.

6 THE COURT: I -- what she's asking and
7 what I'm inclined to agree with is not to use
8 this safe levels of exposure thing. You can
9 talk about OSHA limits. Just don't use that to
10 try to inject into it an opinion about OSHA as
11 to what's safe and what isn't.

12 MR. COWAN: Absolutely, Your Honor.

13 THE COURT: You see what I'm saying?

14 MR. COWAN: I do.

15 THE COURT: Okay. I don't want you
16 cross-examining. If Longo's got some things
17 about the OSHA standards, standards is one
18 thing. Elements of safe level is another one.
19 That's what she wants y'all to stay away from.

20 I will grant that, but that doesn't
21 preclude you from talking about OSHA levels of
22 exposure. And standards of exposure. That's
23 perfectly fair game. So, am I clear?

24 MR. COWAN: I think you are, Your Honor.

25 THE COURT: All right. Thank you. Let's

1 go on to 9: 9 is plaintiffs' motion in limine
2 to exclude hearsay opinions of Dr. Su.

3 MR. ADAMS: Yes, Your Honor. Dr. --

4 THE COURT: First of all, is Dr. Su even
5 going to be in this thing?

6 MR. ADAMS: No.

7 THE COURT: Well, then, we're passing
8 right over that. We don't need that. Dr. Su
9 isn't going to be in the picture.

10 MR. ADAMS: Well, actually, he's not an
11 expert who's going to come testify from the
12 witness stand. But they do try to get in an
13 affidavit that he signed that -- that that's
14 what the motion is targeted at.

15 THE COURT: Well, how are they going to
16 get his affidavit or his video in if he's not
17 going to be --

18 MR. ADAMS: I don't know.

19 THE COURT: Well, I can tell you I'm not
20 going to let it in. But I don't have to
21 otherwise deal with the content of his opinion
22 because he's not testifying, right?

23 MR. ADAMS: That's correct.

24 THE COURT: All right. Number 10, Exclude
25 Speculative Evidence of Alternative Asbestos

1 Exposure.

2 MS. GROSS: That one's me, Your Honor.

3 So we had a similar motion to this in the
4 Payne and Plant cases last year. In Perry,
5 there's two theoretical potential hypothetical
6 alternative exposures that we've touched on.
7 One is this: He was around -- or he could have
8 been around some work being done at hotels.

9 There's no expert on either side who's
10 going to say that it contributed to his disease
11 to a reasonable degree of medical certainty,
12 including defendants' own experts, of course.

13 The other is this brake work that's kind
14 of been glossed over. There's going to be no
15 expert on either side that's going to say that
16 his brake work would be the sole cause, much
17 that it could be this third-party chair --
18 empty chair defense that they might want to
19 utilize.

20 The other thing I want to make really
21 clear is you granted this motion in Payne and
22 Plant. And that if Your Honor recalls, which I
23 know you do, throughout the Plant trial, the
24 defendants kept trying to inject these possible
25 hypothetical exposures by cross-examining

1 Ms. Plant, cross-examining her mother.

2 Sometimes they talked to her about art

3 supplies.

4 So if Your Honor grants this motion, I'm
5 hoping that it's very clear on the record that
6 no alternative exposures can be discussed in
7 the trial with any of the witnesses, because
8 there is no expert on either side that is
9 either going to say it's the sole cause or to a
10 reasonable degree of medical certainty
11 contributed to his disease.

12 THE COURT: All right.

13 MS. GROSS: I summed it up real quick.

14 THE COURT: I understand.

15 All right. Yes, ma'am.

16 MS. BUENO: Your Honor, I am surprised by
17 the argument, which doesn't reflect what was in
18 the brief.

19 The brief, itself, filed by plaintiff,
20 seeks to exclude one type of alternative
21 exposure, which is alleged exposure from
22 hotels. But what I heard counsel just say was
23 that they're roping into this brake work, which
24 I think she said had been kind of glossed over,
25 which is also very surprising, Your Honor,

1 because Dr. Haber, the causation expert for
2 plaintiffs, was recently deposed, and he was
3 asked the question about his long and lengthy
4 opinion in his report about brake exposure and
5 friction work causing Mr. Perry's mesothelioma.
6 And he was asked, "If you take the talc and
7 cosmetic talc aside, if we say, hypothetically,
8 Mr. Perry was never exposed to cosmetic talc --
9 or asbestos in cosmetic talc, is it your
10 opinion that the brake work would have caused
11 his mesothelioma?" And Dr. Haber said, "Yes."
12 He said that the brake work that Mr. Perry
13 performed from 1984 to 1987 -- 72 brake jobs,
14 where he was blowing out and working on drum
15 brakes and grinding them down, Dr. Haber said
16 that was enough to cause his mesothelioma.

17 And I think it's notable that the motion
18 that's before you doesn't talk about brake work
19 at all, because each and every single one of
20 plaintiffs' experts has alleged that the brake
21 work, along with the talc exposure, that they
22 were all and both substantial factors in his
23 mesothelioma.

24 And so --

25 THE COURT: Okay. You don't like the bad

1 brake work. She mentioned brake work. You
2 don't like that. How about the hotel?

3 MS. BUENO: Hotels. So, well, let me tell
4 you what the evidence is and what the evidence
5 will be.

6 Mr. Perry was deposed at length. We've
7 got two different sets of circumstances. One,
8 all of the renovations that were done at his
9 hotels over the years. He worked at a variety
10 of different hotels, starting in Illinois --

11 THE COURT: Yeah, but the bottom line is
12 this: Whether the library or drywall or
13 anything else, there's no expert that says that
14 any of that had any effect on him. They can't
15 quantify any of it.

16 MS. BUENO: Well -- but here's why it
17 matters, separate and apart from causation.
18 Okay. It matters for this reason:

19 Mr. Perry testified, over and over again,
20 that when he was at the Embassy Suites, he was
21 told that the building next to him, which
22 happened to finally be the Hotel Venice -- it
23 was renovated. It was the old library building
24 -- that that was condemned because of asbestos.

25 THE COURT: So what? I'm not going to

1 allow any of that, because you haven't got any
2 expert that ties any of that to any of his
3 mesothelioma. We'll talk in a minute about
4 this brake work. That might be something
5 different.

6 Ms. Gross might have been a little bit
7 over-expansive when she did that, because the
8 thing I'm looking at right now says "hotels."
9 I am granting that.

10 MS. BUENO: Your Honor, and one other
11 thing, just -- just because I need to ask Your
12 Honor's thoughts on it.

13 When Mr. Perry was diagnosed with cancer
14 and he went to the medical university, he met
15 with two doctors there; one of whom is going to
16 be on the stand with us. And that doctor,
17 Dr. Gibney, asked him, "Have you been exposed
18 to any asbestos in your life?" And this was on
19 July the 11th of 2023. And Dr. Gibney's note
20 says, quote, Mr. Perry denies any direct
21 exposure; however, he did use a lot of talc
22 throughout his life as a swimmer. He also used
23 to work at the Embassy Suites, adjacent to the
24 old county library, which, apparently, had a
25 lot of asbestos in the walls.

1 The reason I point this out, Your Honor,
2 is because to the extent plaintiffs want to
3 stand up and cross-examine any of the witnesses
4 or talk to Dr. Gibney about statements in the
5 medical record where Mr. Perry attributed his
6 mesothelioma to talc use --

7 THE COURT: We're getting way off. I'm
8 not going to spend all day long on this. My
9 ruling is, he came into the hotel. On brake
10 work, that's not a part of this motion, so I'm
11 not going to get into any of the rest of that.
12 Okay?

13 MS. BUENO: Thank you.

14 THE COURT: Very good. All right.
15 Now, number 11.

16 MS. GROSS: So number 11 is one that we
17 didn't really have to engage with --

18 THE COURT: Is this the eggshell
19 plaintiff?

20 MS. GROSS: This is the eggshell
21 plaintiff, but I just want to be very clear
22 that it's that one, but it's also --

23 THE COURT: He doesn't have --

24 MS. GROSS: -- it's whatever genetic
25 mutations the defendants come up with --

1 THE COURT: He doesn't have a BAP-1
2 mutation, does he?

3 MS. GROSS: He doesn't have any mutations.

4 THE COURT: Well, then I'm granting it.

5 MS. GROSS: Great. Thank you.

6 THE COURT: Number 12. Motion in liminé
7 number 12, exclude evidence or argument that
8 asbestos markers must be present to diagnose
9 asbestos-induced mesothelioma.

10 Ms. McVey.

11 MS. McVEY: Your Honor, this is kind --
12 you heard this before that some of the defense
13 experts will say, without evidence of pleural
14 plaques or asbestosis, then you can't relate
15 it. That's not a scientifically valid theory.
16 There's no studies that support that.

17 And if you look at the Helsinki criteria,
18 which is, you know, kind of the gold standard
19 of association, it says, specifically,
20 "However, in the absence -- in the absence of
21 such markers, a history of significant
22 occupational domestic or environmental exposure
23 to asbestos will suffice for attribution."

24 Your Honor, so we just seek them to
25 prevent from saying, because he didn't have

1 pleural plaques or asbestosis, that meso is not
2 asbestos-related.

3 THE COURT: All right. Well, here's what
4 I'm going to do about that, Ms. McVey. I'm
5 going to deny your motion on this. That is
6 something you can impeach him on.

7 This thing has very questionable
8 scientific merit, but I'm sure you'll impeach
9 him with evidence. You can deal with that.

10 Number 13. Motion in limine Number 13,
11 preclude corporate representative hearsay.

12 I have ruled on this a million times. I
13 don't need a whole lot of going around the
14 bush.

15 The very nature of a 30(b)(6) witness is
16 that they, quite often, rely on information
17 from other sources, because you can't ever
18 have -- and, particularly, with Johnson &
19 Johnson, something like that, you can't have
20 one person that has personal knowledge about
21 this. They rely on the records and they are
22 enormous.

23 And I've known Dr. Hopkins, I've known
24 that many, many times. He's the 30(b)(6). I
25 don't know if you're going to use him now. He

1 used to be the one in all the cases I've tried.

2 And enormous volumes of material came in.

3 Memoranda and all kinds of things from Johnson

4 & Johnson. He was copied on a lot of it, but

5 not all of it. And he spoke from his knowledge

6 of -- he spoke for the corporation. His

7 knowledge was not just personal, but knowledge

8 gleaned from records and interviews and all

9 kinds of other things.

10 MS. McVEY: But there's one little

11 specific thing in here, real quick.

12 THE COURT: All right.

13 MS. McVEY: First, Judge, normally, you

14 grant -- normal hearsay rules apply. What we

15 mean by that, he can certainly read the records

16 into the record. He has personal knowledge

17 that he testified to that, but he can't tell a

18 story made up from these records somehow.

19 Somehow give a narrative to it. But this one's

20 even more specific, because it's Johnson &

21 Johnson specific. So I want Ms. Gross to talk

22 about this one piece.

23 MS. GROSS: It is very Johnson & Johnson

24 specific, and I'll make it really quick.

25 They have a relatively new corporate

1 representative. He became the corporate
2 representative in the spring of last year. His
3 name is Dr. Kuffner. He'll come here. You'll
4 see him. And what they try to do is they sort
5 of try to launder expert testimony in through
6 Dr. Kuffner, because he has a medical degree,
7 even though he's a corporate representative.
8 He's not an epidemiology degree. (sic) I don't
9 want to go into it too much, but what you need
10 to know is Dr. Kuffner has no personal
11 knowledge about anything about anything with
12 Johnson & Johnson before 2013. They want to
13 bring it -- typically, what they do is they try
14 to get 200 -- over 250 pages admitted through
15 Dr. Kuffner. It's called, "The Comprehensive
16 Report," and it includes information on topics,
17 honestly, they didn't seem to preclude it. It
18 includes information on awareness of cancer,
19 talc pleurodesis, which Your Honor just granted
20 that MIL. The geology section was written by a
21 Johnson & Johnson --

22 THE COURT: Who is Johnson talc baby
23 powder review written by?

24 MS. GROSS: It was sort of a group of
25 people. It --

1 THE COURT: -- internal Johnson & Johnson
2 document.

3 MS. GROSS: Yes, ma'am.

4 THE COURT: All right.

5 And this is Johnson & Johnson's cut on all
6 that stuff from their point of view.

7 MS. GROSS: Yes. And, you know, what they
8 try to do with Dr. Kuffner that makes it --

9 THE COURT: What I'm not going to allow is
10 Kuffner to start getting into what -- for
11 example, through Drew Van Orden from R.J. Lee
12 would say that it's his knowledge about what
13 Johnson & Johnson's factual situation is with
14 respect to sourcing of the quality of the
15 things and so forth. I'm not going to allow
16 that kind of thing to do.

17 I am not going to exclude him from
18 speaking from records to say what Johnson &
19 Johnson's factual situation is. He'll often be
20 doing that. But I'm not going to allow him to
21 get these opinions that are in like the -- I am
22 familiar with this document, and it's got stuff
23 in it. It's just plain all ordinary stuff from
24 the records of J&J, but then it's got a whole
25 bunch of experts and their opinions. And I'm

1 not going to let him be the conduit for
2 offering those opinions. But the corporate
3 records that relate to testing that and all
4 that kind of thing, perfectly okay.

5 MS. GROSS: The other thing they try to
6 have Dr. Kuffner -- and this is the last point
7 I would like to make for Your Honor, because
8 it's completely consistent with what you just
9 said.

10 They will try to have him testify at trial
11 about the opinions of Johnson's baby powder.
12 They do this by -- making a foundation for
13 historical documents and --

14 THE COURT: Well, he's not going to be
15 allowed to testify about his opinions. He's
16 not there to offer opinions. He is there to
17 testify about the records of Johnson & Johnson.

18 There's plenty in their records where they
19 say, "Don't tell them what we found."

20 It's the factual material that's generated
21 from their records is what he's going to be
22 testifying to, but he can't go off on a tangent
23 and start offering opinions. They got plenty
24 of other opinion good people, witnesses who can
25 do that.

1 MS. GROSS: Thank you, Your Honor.

2 THE COURT: All right. All right.

3 Fourteen -- so that's -- that's a denial
4 with some indication of granting the
5 restrictions on using it as an opinion-based
6 document for Kuffner to use. Okay.

7 So now we've got number 14, Plaintiffs' --
8 preclude discussion of "worst case scenario for
9 comparisons" and "no-observed adverse effects
10 level." This is Christy Barlow.

11 MR. ADAMS: This is Dr. Barlow, Your
12 Honor, who I'm sure you've seen before.

13 THE COURT: I've seen Dr. Barlow before.

14 MR. ADAMS: A question for you. The
15 gatekeeper question for an expert is: Are
16 their opinions reliable and do they assist the
17 trier of fact?

18 In this case, Dr. Barlow's opinions on
19 this specific topic are not just unreliable,
20 they're demonstrably false in Johnson &
21 Johnson's own documents.

22 Number 1, Dr. Barlow testifies 0.1 percent
23 asbestos in the product, itself, is the worst
24 case scenario, 0.1 percent asbestos in the
25 product. Except Johnson & Johnson's own

1 records, starting in 1972, said there was
2 0.5 percent asbestos in the product. So
3 Dr. Barlow used it. And by the way, Johnson &
4 Johnson never gave Dr. Barlow any of their
5 records. So Dr. Barlow makes an assumption
6 that's demonstrably false based on records that
7 Johnson & Johnson didn't give her. That's
8 number 1.

9 Number 2, Dr. Barlow makes a second
10 assumption about the amount of asbestos that
11 gets into the air when Johnson's Baby Powder is
12 used. She uses 0.1 percent of the -- this,
13 when you measure the fibers in the air.

14 THE COURT: Tell you what, let me just
15 kind of tell you what we're going to do here
16 from my perspective.

17 This is the battle of the experts. Now,
18 you're going to vigorously cross-examine her.
19 As she gets up there and says some of that
20 stuff, you're going to vigorously cross-examine
21 her and point out the error of her ways. If
22 that error is too severe, I'm going to strike
23 her testimony. So they go with danger and
24 warning signs all over the place. Some of this
25 stuff is highly-unreliable, not supported by

1 anything else in the scientific records, but I
2 am not going to preclude her from the worst
3 case scenario or no-observed adverse effects
4 level. But if she can't back that up by some
5 information that's going to -- in some cases,
6 she hasn't been able to do, I'm going to strike
7 her testimony.

8 MR. ADAMS: Yes, Your Honor.

9 THE COURT: Okay?

10 MR. ADAMS: Understood.

11 THE COURT: So denied with a big, huge red
12 star caveat.

13 Fifteen. Plaintiffs' motion in liminé to
14 exclude any speculative testimony that blames
15 lab contamination for the presence of asbestos
16 in the talc sample.

17 You know, I will just say one thing to you
18 people; that is that that's always the refuge
19 of scoundrels. It's this thing, when you can't
20 think of anything else to say, "Oh, it must
21 have been contaminated in the lab." And I have
22 seen some pretty outrageous things happen about
23 what they have seen might have been the
24 contamination when there's no way -- the thing
25 could have been contaminated. So I will just

1 say this to you, and it's a warning to both
2 sides. You get anything that starts talking
3 about laboratory contamination, you better have
4 some direct evidence there was laboratory
5 contamination.

6 This is often the way of attacking the
7 other side's experts. They say, "We tested
8 Johnson & Johnson baby powder and we found
9 asbestos." And they say, "Oh, it must have
10 been lab contamination of the slides that you
11 used," and all that kind of stuff.

12 I'm going to tell you, I'll listen to a
13 little bit of it, but if it's not supported by
14 something other than we just kind of speculate
15 that is, because we know our lab was so pure it
16 never had asbestos in it, I'm going to strike
17 it all, and I'm going to instruct the jury to
18 draw an adverse inference.

19 So you're playing with fire if you do
20 that. That's all I'm saying. So, I think my
21 views on expected testimony are clear. I'm
22 saying to you, counsel, that I sympathize with
23 your concern about blaming lab contamination on
24 every time they find the results, lab
25 contamination, and I say it, if they don't say

1 that, they better back it up, otherwise the
2 penalties are going to be severe.

3 MR. ADAMS: Understood, Your Honor. Thank
4 you.

5 THE COURT: Sixteen, plaintiffs' motion in
6 liminé to exclude the testimony of Dr. Matthew
7 Sanchez. I got a lot of questions here.

8 And I'll tell you another thing.
9 Dr. Sanchez, we're going to talk about how long
10 this trial's going to take. I spent four days
11 listening to McCrone and Dr. Matthew Sanchez.
12 I will never repeat that again. Yes, ma'am.

13 MS. GROSS: I'm going to try to go through
14 this as quickly as I can.

15 THE COURT: Yes, ma'am.

16 MS. GROSS: Okay. So our ask is that we
17 would like Your Honor to strike Dr. Sanchez in
18 his entirety. Not partially; entirely. For
19 these reasons that were outlined in our brief,
20 so I'm not going to hem and haw over them. I'm
21 just going to hit the high points.

22 The first is Dr. Sanchez cannot define
23 what his definition of asbestos is.

24 THE COURT: Yeah. He's an asbestiform
25 guy, and that is totally discredited as a means

1 of isolating asbestos from what I can tell in
2 this day and age.

3 MS. GROSS: And we're going to talk to you
4 about the two main points under that, but the
5 real main point under that is this whole
6 population requirement that I'm going to
7 explain to you in a minute.

8 THE COURT: I know --

9 MS. GROSS: You know --

10 THE COURT: I know this. I don't need to
11 have instruction. It's 3:15 and I don't need
12 to spend an hour on Dr. Sanchez.

13 MS. GROSS: The next is, he uses the bulk
14 building testing method, and sort of
15 extrapolates it to look at talc under a
16 microscope with a completely different
17 microscope and there's all -- we walked through
18 it all. There's all the peer review
19 publications that say you can't do that. It's
20 bad signs.

21 And then the third, and perhaps the most
22 damning, is when he applies his definition of
23 population asbestos as a ratio using this bulk
24 building method looking under the microscope
25 and looks at photos of raw tremolite, the raw

1 mix-standard tremolite, he says almost a
2 hundred percent of the time, it's not asbestos.

3 And then when you follow up with a
4 question, if you had a hundred of them that
5 look exactly like that, it's still not asbestos
6 for a variety of reasons. We put the whole
7 chart in there. I brought them to hand them to
8 Your Honor. It's kind of small. If you want
9 to see the photos blown up, I can hand them to
10 you. But what the Watson case --

11 THE COURT: But his definition of asbestos
12 in the final analysis, he's a geologist.

13 MS. GROSS: That's correct.

14 THE COURT: So his definition of asbestos
15 has nothing to do with the asbestos properties
16 that are identified by most experts. He says
17 that it's cleavage fragments versus
18 asbestiform. Everything is to be divided in
19 those two ways. I don't know of anybody else
20 that does it that way.

21 And he denominates -- he further
22 denominates, if you really want to drill him
23 down, that chrysotile is a cleavage
24 fragment-type asbestos, so it really isn't
25 asbestos.

1 The latest pronouncement from the EPA will
2 give life to that.

3 So I am very concerned about Sanchez,
4 about both his methodology and slides, but also
5 his ability to opine about what is asbestos,
6 and even worse, he also gets into what can
7 cause mesothelioma. He has no training in
8 that, whatsoever.

9 So I certainly will never let him testify
10 to that. That's not going to happen. But even
11 this very laborious thing that takes up
12 internal -- an eternal jury time is all about
13 the final analysis, if these cleavage fragments
14 are too thick in a form to worm their way into
15 the part of the lining of the mesothelia
16 lining, and cause mesothelioma. He bases that
17 on the geology that he uses. He has no
18 training, as a physician, to say for how things
19 worm their way into lined -- 25 years in
20 causing mesothelioma than the man on the street
21 does.

22 So that's what I'm concerned about, about
23 Dr. Sanchez.

24 So I'm telling you that I am close to
25 saying that Sanchez is going to be excluded.

1 And so what I'm going to do with you -- I
2 understand your argument. I've read all the
3 stuff. I lived through it. So let's see what
4 the other side has to say.

5 MS. GROSS: All right.

6 MR. COWAN: Thank you, Your Honor.

7 Dr. Sanchez is not going to testify that
8 anything causes mesothelioma. He's not a
9 medical doctor. He's not going to testify as
10 to causation. He is not going to testify as to
11 what can and cannot worm their way through a
12 lung.

13 His entire testimony will be focused on
14 what he found as a geologist in the bottles
15 that he has tested. And his -- his analysis of
16 the mine sources that are at issue in this
17 case.

18 THE COURT: But what does that have to do
19 with this case at all? I mean, he's a
20 geologist and he looked at these samples, and
21 he -- he won't have a say they're asbestos, but
22 yet he tries to discuss the more acknowledged
23 categories of asbestos, including, for example,
24 chrysotile, and say that these cleavage
25 fragments are chrysotile and it's not asbestos.

1 If that's what he's going to testify to, I'm
2 not going to allow them to testify.

3 MR. COWAN: Well, I would say the flip
4 side is the same then. What is the relevance
5 of Dr. Longo's testimony?

6 THE COURT: Well, we're not on Dr. Longo
7 right now.

8 MR. COWAN: I understand who we're dealing
9 with, but if a geologist and a microscopist,
10 his testimony about what he believes is and is
11 not asbestos within that bottle is not
12 relevant, simply because he does not think some
13 of the particles are not asbestos --

14 THE COURT: Well, that's the only basis
15 he's got for saying.

16 He's got this theory that he has put
17 forward that asbestos can only be asbestiform
18 fibers, and cleavage fragments cannot be
19 asbestos. That's his theory, based on his
20 geological observance of material.

21 MR. COWAN: It's also contingent with how
22 the EPA defines asbestos.

23 THE COURT: Was. Was.

24 MR. COWAN: I believe that that regulation
25 is still in place.

1 THE COURT: It might be. But everything
2 that's happened since then is a huge variance
3 with the concept that asbestiform, as Matthew
4 Sanchez defines it in these slides,
5 characterizing it that way as a comparison with
6 cleavage fragments, that's the other thing so
7 mind-boggling about this thing.

8 He kind of works backwards to it. He
9 takes these cleavage fragments. And he takes
10 these cleavage fragments, slaps them on
11 something, then he works back to it. These
12 other things, well, they got to be something
13 else. They're not cleavage fragments. Oh,
14 well, I guess they're asbestiform. Then he
15 goes through all this malarkey about how
16 asbestiform works.

17 MR. COWAN: I don't think that I will be
18 convincing Your Honor anything about
19 Dr. Sanchez today, but I will say that if
20 plaintiff believes there has been this c-change
21 (ph) in what is and what is not asbestos, then
22 they are more than capable of cross-examining
23 Dr. Sanchez on his -- on his opinions. And I
24 think I'll just leave it at that.

25 THE COURT: Okay.

1 MR. COWAN: Thank you, Your Honor.

2 THE COURT: All right.

3 MS. GROSS: A couple of quick things: The
4 issue is with his methodology with how he got
5 there. And that methodology is unreliable.

6 You heard him. You heard counsel say that
7 he uses the EPA's definition. The EPA's
8 definition in the whole building analysis,
9 which has never been meant to be extrapolated
10 to use looking at cosmetic talc under a TEM --
11 a giant TEM microscope that they used
12 throughout the Plant trial. Countless peer
13 review publications have said that is improper
14 and is junk science --

15 THE COURT: That's this whole thing about
16 the kinds of microscopy we use, the JE --
17 whatever one, the TEM, all that kind of thing.
18 Well, that's the battle of the experts.

19 MS. GROSS: And we know his opinion -- his
20 method -- excuse me. We know his methodology
21 doesn't work. And we know his definitions
22 don't work, because he looks at raw asbestos
23 under a microscope and he says it's not
24 asbestos.

25 So we know that his methodology is

1 unreliable. We know the Court should exercise
2 its gatekeeping function.

3 Unless you have questions for me further,
4 I'm going to leave it at that, but I could go
5 on for hours.

6 THE COURT: Yeah, I understand. I'm very
7 shaky-shaky about Sanchez, because I -- you
8 know, that's the part of it that really bothers
9 me the worst, is you get stuff that's
10 acknowledged to be raw asbestos. He puts it
11 under a microscope and says it's not asbestos.

12 MS. GROSS: It's also been noted
13 throughout these peer review publications that
14 we cited in the brief that you read that if you
15 use this method that he says, like just looking
16 at the aspect ratio concept, unless it's
17 20-to-one, it doesn't count. You can say it's
18 not asbestos, right? If you look at the charts
19 that we included in one, I think it's in
20 Dr. Parker's article. It's on page 8 of our
21 motion. It talks about how, if you use
22 Dr. Sanchez's method, you miss a massive
23 amount. If you use this 20-to-one aspect ratio
24 minimum, you're going to find 13 percent of
25 fibers --

1 THE COURT: Yeah, 98 percent of raw
2 asbestos. Not asbestos, if you use Sanchez's
3 approach.

4 MS. GROSS: That's correct.

5 THE COURT: And the only question I got is
6 this, you know, it's the battle of the experts.
7 You know, they're going to be doing the same,
8 you know, attack on your experts.

9 I am -- as I say, I am very, very
10 questionable about Sanchez and this aspect
11 ratio is not supported now by anybody. McCrone
12 use to be -- they were the big defenders of
13 J&J. They came up with all this business.
14 It's now been thoroughly discounted by later
15 expert examination.

16 I don't know. I'm very hesitant about it.

17 MR. COWAN: Your Honor, may I at least
18 address the --

19 THE COURT: I mean, you know, one thing
20 that's said about Sanchez, if you're using PLM,
21 and you're using it in bulk materials, then his
22 thing may have some pertinence, but that's not
23 what we're talking about here. We're talking
24 about the much finer expert examination of
25 processed and marketed talcum powder and

1 whether it has asbestos in it. And his methods
2 simply don't get in the hemisphere of dealing
3 with the sophisticated determinations you have
4 to make in this thing. He's way back in the
5 geology of it and some kind of very basic, much
6 more basic world.

7 I mean, my family was in the sand-mining
8 business for many, many years. And so I am
9 sensitive to mining techniques and what you can
10 use to examine them.

11 We used a lot of sophisticated glass
12 capacitor and other kind of uses, because we
13 have very high ISO and very low FE. But the
14 way you examine those kind of minerals is about
15 the way he's examining this stuff, and it's a
16 much grosser examination to yield results.
17 And, you know, something like sand, even very
18 fine mill sand, then it is a sophistication it
19 takes to look at talc, and, particularly,
20 cosmetic talc.

21 And that's what's got me about taking this
22 very gross measuring device of Sanchez and
23 particularly taking up a bunch of court time
24 with all this nonsense when it really doesn't
25 have much ability to look at and tease out

1 whether there is or there isn't asbestos in
2 cosmetic talc. And particularly when you got a
3 guy who defines asbestos in a very different
4 way.

5 MR. COWAN: May I respond, Your Honor?

6 THE COURT: Yes, of course.

7 MR. COWAN: I'm not sure if you want me at
8 the --

9 MS. GROSS: I had a couple -- I had a
10 couple of quick points.

11 THE COURT: Let Mr. Cowan do it.

12 MR. COWAN: I'll be very brief.

13 THE COURT: Let him respond.

14 MR. COWAN: I don't think she needs to be
15 convincing you anymore. I think I need to get
16 up here for a moment.

17 Your Honor, I understand the point about
18 R-93 and your concerns there. The issue,
19 though, is that Dr. Sanchez does not just look
20 at these samples but the PLM, using that EPA
21 R-93. He uses XRD. He uses R-93 on the PLM.
22 He uses 22662-1 TEM. He used a different
23 methodology in his previous iterations of
24 reports, and then switched to the ISO.

25 Regardless, he is using all three.

1 THE COURT: He's using those various
2 devices. You're quite right about that,
3 Mr. Cowan. Here's what's got me worried about
4 this: He's got this mindset that about
5 98 percent of what the rest of the world will
6 say is asbestos, in his view, it's not
7 asbestos.

8 MR. COWAN: Well, I --

9 THE COURT: And that's -- that's what --
10 putting a guy like that in front of a jury to
11 take up a couple of hours with all this
12 malarkey. He gets into -- when the bottom line
13 is, he has got such a grossly different way of
14 defining the basic substance we're talking
15 about than anybody else that will testify.

16 MR. COWAN: I respectfully, obviously,
17 disagree with the statement that you just made.
18 However, at the end of the day, this is a
19 battle of the experts. I have problems with
20 Dr. Longo's methodologies, which we will be
21 discussing later. We'll be discussing that.

22 I have not tried to completely exclude
23 every opinion that he's ever had. I have an
24 issue with one portion of his PLM analysis.

25 But this is going to be a battle of the

1 experts. They, obviously, have ammo to use on
2 cross-examination. He has a Ph.D. in geology,
3 who has been studying national occurring
4 asbestos for the last 24 years. He is a
5 qualified expert that is actually using
6 published methodologies that you, sir, may --
7 ma'am, may disagree with. But at the end of
8 the day, they are still published
9 methodologies. And, in fact --

10 THE COURT: Well, I mean, there are a lot
11 of things published that now, in the light of
12 what we now know, just don't hold any water.
13 But, you know, I mean, I spent a fascinating
14 day about three years ago in the
15 newly-renovated Peabody Museum at Yale, which
16 is just one of my favorites in the world. My
17 husband and daughter went there and my sister
18 went to med school there, so I was up visiting.
19 And they have this whole exhibit on asbestos,
20 and it was absolutely fascinating to trace
21 through how these rocks were examined. This,
22 of course, asbestos is naturally occurring
23 among talc and other things. They had these
24 things and then they had the -- the examination
25 of what they look like as your examination got

1 more sophisticated and more sophisticated.
2 Looked at different kinds of light microscopy
3 and other ways of looking at these things. And
4 the progression that has been made since
5 McCrone landed on this theory of asbestiform
6 and non-asbestiform years and years ago is
7 staggering. And that's what I'm sensitive to.
8 The world has changed since they hatched up
9 this way of looking at things. And for a long
10 time, people bought it. But it has turned out
11 to not be a very believable thing in this day
12 and age.

13 MR. COWAN: I would just -- Your Honor, if
14 we're going to talk about how things have
15 changed, that Dr. Longo's methodology has been
16 around -- I mean, he use to --

17 THE COURT: Please don't get into
18 Dr. Longo. We don't --

19 MR. COWAN: Oh, I understand, but things
20 have changed. Methodologies have remained
21 relatively constant. And so I would just -- I
22 would say, and you, obviously -- I haven't been
23 to that museum. I'd like to go, but -- and you
24 may know more about this than I do at this
25 point. You've been doing this for awhile. But

1 as I see it --

2 THE COURT: That exhibit's probably long
3 since gone since I saw it.

4 MR. COWAN: But as I see it, this really
5 is an issue of weight versus admissibility.
6 There is no doubt that --

7 THE COURT: Watson versus Ford Motor
8 Company. And in that case, we said there comes
9 a time when it's so outside the mainstream that
10 even though you've got this highly-educated
11 expert, that expert can't offer opinions on
12 what that expert is being offered for.

13 In that case, it was a guy from -- he was
14 an expert in big naval engines, and he was
15 offered as an expert on cruise control. He
16 never looked at a cruise control or dealt with
17 it. Didn't know nothing about it.

18 So even though he was degreed and lettered
19 and brilliant about magnetic interference,
20 which is what he thought it was,
21 electromagnetic interference, turned out that
22 had nothing to do with the cruise control, and
23 we reversed that case for that reason.

24 And said the judge has got the
25 responsibility to look on the front-end and see

1 whether these opinions that are going to be
2 offered have really got the kind of scientific
3 acceptability to them. They've got to have
4 some basic ability.

5 And what this guy is, is a geologist, who
6 has rarely found asbestos in anything. And
7 that is light years away from the mainstream
8 from most people that have looked at these
9 materials over time.

10 MR. COWAN: Just so you know, he has found
11 asbestos in the bottle of Johnson's baby
12 powder.

13 THE COURT: Oh, wow. That's since I last
14 saw him.

15 MR. COWAN: Well, if he comes here, we'll
16 talk about it.

17 But regardless, I understand the Court's
18 gatekeeping rule, and I understand there are
19 factors that need to be addressed.

20 And one of those is, obviously, whether or
21 not the methodology is published. It is. And
22 one of them is whether or not the methodology
23 is testable. It is. And the fact that the
24 Court, I understand -- and I don't think I'm
25 going to convince you otherwise -- you don't,

1 Your Honor, agree with Dr. Sanchez --

2 THE COURT: I am sure of one thing; that
3 asbestos can include some fibers that are
4 little, strong, skinny fibers, and it can also
5 contain these --

6 MR. COWAN: Well --

7 THE COURT: -- fragments. But I am also
8 convinced that the majority opinion of people
9 who look at those -- this, that both of those
10 are asbestos.

11 MR. COWAN: Okay. There are many, many
12 publications that would disagree with you.

13 THE COURT: Oh, yeah. I know.

14 MR. COWAN: But regardless, that's kind of
15 the point.

16 THE COURT: Okay.

17 MR. COWAN: I mean, the fact that there is
18 a disagreement doesn't make it inadmissible.

19 THE COURT: All right.

20 MR. COWAN: Thank you.

21 MS. GROSS: One final point. There is no
22 methodology. There isn't. This R-93 thing,
23 R-93 is meant to be used as a PLM.

24 What Dr. Sanchez does, is he takes that
25 and he extrapolates it and he uses it with a

1 TEM, that giant microscope we put up for trial
2 last year. He completely misuses the testing
3 methods. There is no methodology. There is no
4 scientific publication or science on earth that
5 says what he's doing is good science. None.

6 Where I deposed Dr. Longo, and I know we
7 don't want to get into it, but because we
8 touched on the battle of the experts, I just
9 want to be clear. What Dr. Longo does is he
10 uses the methods prescribed by AHERA, ISO,
11 which Your Honor talked about. You know all
12 that. That's the difference.

13 THE COURT: I don't want to do that part.

14 MS. GROSS: Okay.

15 THE COURT: I, at the present time, am not
16 ready to rule Matthew Sanchez out completely,
17 so I am holding out on the motion to exclude
18 his testimony completely. But I am very, very
19 concerned, and the concerns I have voiced at
20 considerable length to all of you today. I
21 will see how things develop.

22 When Sanchez begins to testify, if there
23 isn't a proper foundation laid right to begin
24 with before getting into this mind-numbing
25 scenario that he goes through, I am going to

1 entertain a motion to exclude his testimony and
2 you're going to suffer the consequences of
3 having him in front of the jury, an expert
4 who's disqualified, because I think he is right
5 on the edge. And what we said in Watson versus
6 Ford Motor Company was outside of what all is
7 accepted.

8 So with that, I am denying the motion, but
9 it's with a lot of caveats.

10 Seventeen.

11 MS. GROSS: It may be easier for Your
12 Honor to argue the Diette and the Weill one at
13 the same time.

14 THE COURT: Diette and who?

15 MS. GROSS: Weill. Dr. Weill. It's
16 Number 21. Because we move to strike them for
17 the same reason -- partially strike them for
18 the same reason.

19 THE COURT: Well, let me just say this
20 about both of these to begin with: I'm not
21 allowing anybody to testify that Mr. Perry's
22 mesothelioma is spontaneous or idiopathic.

23 With respect to Diette, he is a
24 pulmonologist. I don't think he has got
25 enough -- he is a COPD man and an asthma man.

1 He doesn't have any background in mesothelioma,
2 as I understand it. I've limited him in the
3 Plant case and said that he could not give a
4 specific causation opinion about the
5 plaintiff's mesothelioma; that it was
6 spontaneous. And I did that with respect to
7 Dr. Diette, Dr. Weill, and Dr. Feingold. And
8 I'm going to make those same rulings today.

9 So if that helps, they are not going to be
10 allowed to opine on the cause of the
11 mesothelioma of Mr. Perry. They are not
12 qualified to do that.

13 Now, the only reason I let them in is that
14 I am so far confident that given the confidence
15 of defense attorneys -- and I'm relying,
16 particularly, on Mr. Brown in this regard, I
17 think they understand this ruling and will so
18 instruct their clients.

19 I had one witness that, despite all my
20 rulings -- that was Dr. Attanoos. Attanoos.
21 And Attanoos is so egotistical about what he
22 knew and what he didn't know that he would not
23 follow my instructions.

24 MS. GROSS: Dr. Feingold did it last year
25 in the Plant trial, as well.

1 THE COURT: Dr. Feingold did a little bit
2 of it in this very room. I'm not going to
3 permit that. I'm saying they cannot testify as
4 to the cause of his mesothelioma. Not only can
5 they not testify that it was spontaneous or
6 idiopathic; meaning, I don't know or it just
7 kind of happened, they are not going to be able
8 to testify to that. And if they now start
9 testifying that they know the cause of the
10 mesothelioma, I'll strike all the testimony.

11 So they need to be instructed to stay
12 between the guardrails. And that's how I'm
13 going to deal with this. So that ought to deal
14 with 17. That's Diette.

15 MS. GROSS: And 21.

16 THE COURT: Twenty-one?

17 MS. GROSS: Yes, ma'am.

18 THE COURT: That's --

19 MS. GROSS: Weill.

20 THE COURT: -- Weill. And the other one
21 is not being offered yet.

22 MS. GROSS: Feingold's not in this case.

23 THE COURT: Feingold's not in this case;
24 just Diette and Feingold.

25 MS. GROSS: Diette and Weill.

1 THE COURT: And Weill.

2 MS. GROSS: Yes, ma'am.

3 MS. BUENO: Your Honor, may I respond?

4 Understanding Your Honor's ruling, I do
5 think it's important for you to understand what
6 has happened in recent months leading up to
7 this trial.

8 THE COURT: All right.

9 MS. BUENO: I have right here your Order
10 in the Plant trial --

11 THE COURT: Yes, ma'am.

12 MS. BUENO: -- where you excluded these
13 two experts at issue, Dr. Diette and Dr. Weill.
14 And what you did is, you said, on the third
15 page, that they are able to testify, generally,
16 about the rates of mesothelioma cancer in
17 women, which are spontaneous or naturally
18 occurring, but you said they are excluded from
19 testifying about the specific plaintiff's
20 cause, and you explained why in great detail.
21 And you said, "The Court finds these doctors
22 have not made an attempt to determine the
23 products at issue contained asbestos at all."
24 You criticized them for not looking at fiber
25 type, for not reviewing any studies, for not

1 considering the presence or lack of presence of
2 asbestos in the products, and additional
3 deficiencies. And you, basically, said these
4 doctors cannot say that this was naturally
5 occurring, because they haven't considered the
6 potential exposure for this plaintiff.

7 So what we did is made a very concerted
8 effort to fix it, to fix these deficiencies.
9 And what Your Honor may not be aware of is that
10 in the reports that Dr. Diette and Dr. Weill
11 served in this case, which are attached as
12 exhibits to our response, they made an
13 exhaustive effort to review, in detail, all of
14 the materials that you criticized them for not
15 reviewing previously.

16 And I've got those reports here. I'm
17 looking, for example, at Dr. Weill's report.
18 And it starts on page 1 with the chart of
19 materials reviewed and it goes multiple pages.
20 He reviewed all of Dr. Longo's testing --

21 THE COURT: Let me just say this,
22 Ms. Bueno: Part of my problem with them is not
23 reviewing the specifics of Ms. Plant. But the
24 other part of my problem with those two is they
25 don't have any information about -- sufficient

1 to make a diagnosis of Ms. Plant's
2 mesothelioma.

3 So it's not just information about the
4 general thing. I have no confidence in the
5 opinion that these cancers are spontaneous and
6 these cancers are idiopathic. I would never
7 allow idiopathic to be put before a jury,
8 because that just means "I don't know."

9 Spontaneous occurrence of mesothelioma is
10 rare as hen's teeth. Mesothelioma is a
11 signature cancer, and it is almost invariably
12 caused by asbestos. And that is what troubles
13 me about these experts. They pretend to say
14 that there is actually data out there to
15 support the diagnosis of spontaneity, and even
16 go far enough to say that hers -- Ms. Perry's
17 is spontaneous or idiopathic, but they don't
18 have any scientific basis for that, because
19 this -- this opinion is -- the spontaneity
20 is -- we can't explain it any other way, so it
21 must have been spontaneous. Idiopathic is, we
22 just can't explain it at all. It's just
23 something that happens.

24 That's not a scientific diagnosis or a
25 scientific opinion, in my view. And I

1 absolutely will not let that go to a jury. I
2 don't care whether they have now done a whole
3 bunch of studies about asbestos or not. The
4 opinion they offer is not a scientifically
5 reliable opinion.

6 MS. BUENO: I think the opinion they offer
7 is a little different than what you're stating.
8 So let me explain to the Court exactly what
9 they testified to.

10 Here's what they testified to:

11 They said, we have reviewed -- both of
12 them independently -- reviewed these materials
13 that the Court has asked us to. We've looked
14 at the data. We've looked at Dr. Longo's
15 reports. We've looked at Dr. Bailey's reports.
16 Right? And we have now considered in our mind,
17 even if they are correct about the amount of
18 asbestos they say in talc, would that be enough
19 to have caused this patient's mesothelioma?
20 And they both have concluded that, based on
21 epidemiology and exposure assessments and
22 published literature and the like, they have
23 come to a conclusion that cosmetic talc was not
24 the cause.

25 Then they say -- both of them -- Dr. Weill

1 testified about this most recently in his depo.
2 He said, "Look, I have considered all of this,
3 and even if there is this sub ultra-trace
4 amount of asbestos that plaintiffs claim, it's
5 my opinion, to a reasonable degree of medical
6 certainty, it is not enough to cause
7 Mr. Perry's mesothelioma."

8 THE COURT: And yet they know nothing
9 about Mr. Perry. They haven't examined
10 Mr. Perry. They haven't examined Mr. Perry's
11 details about his lungs, or anything like that.
12 This is all based on their just kind of general
13 opinion that if you can't explain it, it's
14 spontaneous. Well, they may not be able to
15 explain it, but the doctors that have looked at
16 him do explain it. And it's not a proper
17 counter to the doctors who do explain it.

18 MS. BUENO: There is not a doctor --

19 THE COURT: There's no explanation for it.
20 It's spontaneous. That is not something I find
21 as justified in any scientific --

22 MS. BUENO: That's not what they're
23 saying. They're saying, if it was
24 asbestos-related, I know it's not talc for
25 these reasons. And so if it's not

1 asbestos-related, then I believe it's naturally
2 occurring, because there are cases of that.
3 That is their opinion. It's not talc. I don't
4 have enough --

5 THE COURT: How do they exclude talc?

6 MS. BUENO: Because they look at the
7 epidemiology. Like Dr. Diette goes into great
8 detail into the miners and millers studies and
9 how --

10 THE COURT: I'm not talking about any of
11 that stuff. I'm familiar with all of that old
12 stuff. Even Vogner appealed it at one point.
13 That's not enough.

14 MS. BUENO: They are epi --

15 THE COURT: I'm asking what they looked at
16 in Perry and in the products Perry used. They
17 didn't look at any of that.

18 MS. BUENO: Well, they looked at it. They
19 looked at all of the data that plaintiffs
20 allege related to asbestos content in the
21 products used.

22 THE COURT: I'm asking you a very specific
23 question, Ms. Bueno.

24 MS. BUENO: Yes.

25 THE COURT: They propose to say Perry's

1 mesothelioma cannot be caused by talc. They
2 want to make that opinion to the jury.

3 MS. BUENO: They want to say --

4 THE COURT: They are not qualified. They
5 don't know anything. They haven't examined
6 Perry. They haven't examined his lung slide or
7 anything like that. They don't have the
8 ability to do that. They're not trained in
9 that.

10 MS. BUENO: Then it would be the same for
11 Dr. Haber, who plaintiffs wish to put on the
12 stand and say the opposite.

13 THE COURT: You-all are going to be going
14 one expert after another. We're talking about
15 this expert.

16 MS. BUENO: Okay. This expert, both
17 Dr. Diette and Dr. Weill, are qualified,
18 according to you, in the Plant case to come to
19 the jury and say, there are a certain number of
20 cases where there has not been identified
21 asbestos exposure and plaintiffs have
22 mesothelioma, and those are called either
23 naturally-occurring or spontaneous, according
24 to the literature. They have said that. And
25 Dr. Brody, plaintiff's pathology expert, will

1 say that.

2 So then here is the point, then. They are
3 allowed to say there are a certain number of
4 cases --

5 THE COURT: They are not allowed to say
6 anything about the diagnosis of Mr. Perry,
7 because they're not qualified to do that.
8 That's my ruling. That's the same ruling I
9 made in Plant. And the fact that you may have
10 studied it at length and decided that you got
11 down on some other facets of the case makes no
12 difference in my ruling. I am not going to
13 allow them to express a medical opinion that
14 they're not qualified to express.

15 MS. BUENO: Is there anything for future
16 knowledge from Your Honor -- because we tried
17 to rectify the Plant situation by having them
18 review the material that you identified in your
19 order. Is there anything that a pulmonologist
20 can do to come and offer an opinion that
21 cosmetic talc is not to blame, having reviewed
22 the epidemiology and the medical literature,
23 the exposure studies, et cetera?

24 THE COURT: I am not going to rule in the
25 abstract on that.

1 MS. BUENO: Okay. Thank you.

2 THE COURT: All right. Where are we?

3 MS. McVEY: Number 18, I think, Your
4 Honor.

5 THE COURT: All right, 18. To preclude
6 defendants, and their lawyers, and their
7 witnesses from offering statements regarding
8 their personal use of talcum powder products.
9 All right. I will grant that.

10 MS. BUENO: Thank you, Your Honor.

11 THE COURT: Plaintiff -- motion in limine
12 19, to exclude the 1986 letter from H.W.
13 Swanson to Phillippe Douillet.

14 MS. BUENO: Your Honor, may I respond to
15 this one, please?

16 THE COURT: I ruled, and then I guess it
17 just kind of passes over everybody.

18 MS. BUENO: Well, Your Honor, I think
19 that --

20 THE COURT: This goes back to Bell and all
21 that kind of stuff.

22 MS. BUENO: No, no, it does not. It does
23 not. And that's why I think it's important.
24 It actually overlaps with a motion you heard on
25 Dr. Barlow earlier. And so this is --

1 THE COURT: And I let Barlow in.

2 MS. BUENO: You did.

3 THE COURT: Barlow is not going to be the
4 wedge where you're going to get this Douillet
5 thing in.

6 MS. BUENO: Oh, no, no, no. It's the FDA
7 Citizen's Petition Response. That's what this
8 is, Your Honor.

9 So plaintiffs' motion in limine 19 is the
10 1986 FDA response to a citizen's petition that
11 outlined the worst-case scenario the FDA --

12 THE COURT: This isn't FDA. This is a
13 letter between two people, and I am not going
14 to allow it.

15 MS. BUENO: It is not. It is the FDA's
16 response to the citizen's petition. That's
17 exactly what it is. The title of it is --

18 THE COURT: And it contains false and
19 unreliable expert opinion that they just kind
20 of throw in there. It's not their opinion.
21 It's some other expert. And, therefore, its
22 probative value is strongly outweighed by its
23 prejudicial effect, in my view.

24 MS. BUENO: It can be offered for other
25 purposes, as well, as far as notice and other

1 issues, as well.

2 THE COURT: Well, you've got a lot of
3 other ways of proving that than that
4 Swanson/Douillet letter, so I'm not letting it
5 in.

6 All right, 20. Motion in liminé regarding
7 admissibility of documents without sponsoring
8 witnesses.

9 MS. McVEY: This is really simple. So
10 Johnson & Johnson has entered a stipulation
11 that certain documents within a Bates range are
12 both authentic and business records.

13 THE COURT: Right, right.

14 MS. McVEY: All right. And so, as you
15 know -- and I'm going to hand you what we
16 filed, and the defendants already have a
17 copy -- is our motion to pre-admit exhibits.

18 THE COURT: Yeah, yeah, yeah.

19 MS. McVEY: And you'll see -- we just want
20 them to follow the stipulation that they've
21 agreed to. In other words, if we put in a
22 Johnson & Johnson document that they have
23 agreed is authentic and a business record, it
24 should be admitted into evidence without having
25 to have a sponsor witness.

1 THE COURT: I agree. And that's going to
2 be resolved before we get to trial. I am not
3 going to get into a position where I've got to
4 interrupt a trial for a whole bunch of that
5 nonsense.

6 MS. McVEY: Your Honor, it's important
7 because we're going to move these cases fast,
8 as you know.

9 THE COURT: Right. If these are J&J
10 documents, they're coming in. Yes, ma'am.

11 MS. PEPKE: Your Honor, I think the point
12 is premature. Authenticity and business
13 records does not necessarily equal
14 admissibility. It will in most cases.

15 THE COURT: My friend, I rule on all these
16 things in advance. I don't have a bunch of
17 evidence fighting while I'm trying these cases.
18 Time is too precious to do that. I try to try
19 these cases in a week. We're going to talk
20 about what we're going to do with this case.
21 But I'm not spending a bit of time as a witness
22 is on the stand or when the documents are up.

23 We pre-admit in the cases I try. So she's
24 got a pre-admit list, and we're not going to
25 have any debate once trial starts. If it's a

1 Johnson & Johnson exhibit -- a Johnson &
2 Johnson record that has been given to y'all,
3 that y'all have given her, or she's got some
4 other places and you agree it's a J&J record,
5 it's coming in.

6 MS. PEPKE: Your Honor, I understand that
7 ruling. We just received that pre-admit list.
8 That wasn't with this motion. It came in
9 later. We haven't thoroughly reviewed it. If
10 we have an objection, for example, hearsay
11 within hearsay in that document --

12 THE COURT: Hearsay within hearsay is not
13 going to be the kind of thing that we will
14 knock out in a business record, but whatever.

15 MS. PEPKE: 403 and 401, that would also
16 be proper basis to object that are not covered
17 by authenticity or business record.

18 If we have objections to that list, all
19 we're saying is we want to be able to bring it
20 to you, not while a witness is on the stand.

21 THE COURT: Well, I'm not going, in the
22 middle of a trial, to go through a whole bunch
23 of nonsense about this. If you all -- if you
24 think that I will take a big thing like this
25 and have you object to it for all these various

1 reasons, and have me sit down and do that, I'm
2 not going to do that.

3 MS. PEPKE: Understood. If we have
4 specific ones in a very limited set, we would
5 like to approach you on that.

6 MS. McVEY: Your Honor, just to be quick.
7 I'm sorry. If you all would get us any
8 objections by Thursday to this list of
9 documents --

10 MS. PEPKE: That, we can do.

11 MS. McVEY: That way, we can identify --

12 THE COURT: I'll see what I can do.

13 MS. PEPKE: That's what we're asking.

14 THE COURT: Okay.

15 MS. McVEY: Thank you very much. Just so
16 I understand, y'all are going to get us
17 anything by Thursday?

18 THE COURT: That's good. Y'all are good.
19 All right. Twenty-one. That's Weill. We've
20 already dealt with that.

21 Twenty-two.

22 MS. McVEY: All right. Your Honor, 22 is
23 a spoliation motion that you heard in the
24 McBrayer case. And we argued that -- Ally
25 Brown came down from -- came down, and

1 Mr. Bernardo, and we argued about documents
2 that have been spoliated. And you entered an
3 order which Johnson & Johnson has. And I just
4 handed the order to you.

5 Nothing at all has changed since that
6 order was entered. So we would ask you to
7 enter the same order in the Perry case and give
8 the same spoliation charge.

9 MR. COWAN: Your Honor, I'm not going to
10 re-litigate this at all, but I would like to
11 put something on the record.

12 THE COURT: Do what?

13 MR. COWAN: I'm not going to re-litigate
14 this at all. I understand your prior order,
15 Your Honor. I just would like to put something
16 on the record just very briefly because --

17 THE COURT: Okay.

18 MR. COWAN: We understand the order.
19 Obviously, we respectfully disagree with the
20 order, but we've incorporated our McBrayer
21 briefing in our response we filed with the
22 Court. If the Court grants the relief,
23 however, if the Court signs the same order,
24 defendants note that the Court's order has
25 previously stated "requires plaintiff to inform

1 defense counsel of what tests plaintiff
2 contends are included in the scope of the
3 order." I think it's the last page of the
4 order, Your Honor.

5 And it requires that be done in a
6 sufficient time before trial. We are now less
7 than a week --

8 THE COURT: Hold on a minute. I'm
9 looking.

10 MR. COWAN: Yes, Your Honor.

11 THE COURT: Is what you're talking about,
12 "In addition, it is hereby ordered that Johnson
13 & Johnson and its lawyers and experts are
14 precluded from suggesting limitations to kinds
15 of testing due to lack of underlying data when
16 the underlying data does not exist because of
17 J&J's conduct"?

18 MR. COWAN: No. I believe it comes right
19 after that. If I could take a look at the
20 order you're looking at?

21 THE COURT: Oh, it's, "Finally, plaintiff
22 is instructed to inform defense counsel for
23 what tests plaintiff contends were included in
24 the scope of this or in a sufficient time
25 period to review before trial"?

1 MR. COWAN: Correct. So I'm referring to
2 that provision.

3 THE COURT: Right, right.

4 MR. COWAN: So that provision provides
5 that they need to provide notice of the tests
6 that they believe are within the scope of the
7 order.

8 McBrayer's order was signed and entered
9 nearly three years ago, obviously, before this
10 case was even filed. But it's fair to say that
11 when it got filed, this case, that plaintiff
12 was pretty sure they were going to be trying to
13 get this order, again, understandably, because
14 they were before the same judge.

15 So I would respectfully submit that, at a
16 minimum, they could have identified these tests
17 three weeks ago when they filed this motion for
18 entry of this order. We are now less than a
19 week away from trial and we have not been told
20 what tests that they believe are within the
21 scope of this order.

22 So my suggestion is that Your Honor --
23 that this order can be signed, but it's too
24 late. The time has elapsed. We don't have
25 enough time to be dealing with which tests are

1 you going to be claiming today, and, by the
2 way, what evidence are you going to be putting
3 on that proves that that particular underlying
4 data from McCrone, R.J. Lee, wherever it's
5 from, that we, Johnson & Johnson, ever had the
6 underlying data to begin to preserve --

7 THE COURT: Well, that's just an argument
8 against the whole law.

9 MR. COWAN: No, no. It's not, Your Honor,
10 because if we had enough time, they could tell
11 us what the evidence was. They could tell us
12 what the test was. And then we could have time
13 to prepare a response.

14 THE COURT: Well, let me tell you this:
15 This order, which is an order involving Johnson
16 & Johnson, was signed by me in --

17 MR. COWAN: 2021.

18 THE COURT: -- 2021. All right. Your
19 client has known about this for a very long
20 time. That's one.

21 Number 2, your client has jumped through
22 every hoop imaginable from the Texas two-step
23 to Lord knows what to put a stop on the trial
24 of Johnson & Johnson cases in state court, and
25 that includes in this court. Now, suddenly,

1 you come up at the last minute with an issue
2 that has been around a long time and try to put
3 it back on the plaintiff that you have been
4 surprised by what's going on here.

5 MR. COWAN: I'm not surprised at all. The
6 issue is --

7 THE COURT: Well, then, if you're not
8 surprised, I don't get the problem.

9 MR. COWAN: May I -- may I respond? The
10 problem is that it is plaintiff's burden under
11 that order to provide us the tests. They have
12 failed to do so.

13 THE COURT: I haven't signed the order
14 yet. That's the first thing.

15 MR. COWAN: I totally understand, but the
16 issue is that they sought the entry of this
17 order at the end of the -- right before the
18 beginning of trial.

19 THE COURT: Mr. Cowan, let me see what
20 Ms. McVey has to say about that.

21 MR. COWAN: Thank you, Your Honor.

22 MS. McVEY: Your Honor, they know exactly
23 what tests we're talking about. They answered
24 discovery where they said whether they got the
25 underlying data for each of these tests or not.

1 If they need to give you a list of the stuff
2 they've already provided to us, then I'm sure
3 we can do that. But this is not that kind of
4 issue. This order, by the way, was right
5 before they felt like this for the first time.
6 Do you remember that?

7 THE COURT: Yes, I do.

8 MS. McVEY: And so it's now been years
9 that they've known about this. It's not a
10 surprise what tests we're talking about, but
11 certainly if they need us to give them a list,
12 we'll give them a list. But they know. They
13 answered discovery.

14 THE COURT: Yeah. That's very much my
15 feeling about the matter.

16 MR. COWAN: Can we get a deadline by which
17 we can get that list?

18 MS. McVEY: We'll reproduce your discovery
19 responses to you on Thursday.

20 THE COURT: I'm not going back and forth
21 on this, Mr. Cowan. Really, this whole shock
22 and surprise of "they're treating us so bad,"
23 I'm frankly ashamed of you for making that kind
24 of argument here. Johnson & Johnson well knows
25 about this stuff. Y'all have been back and

1 forth about this stuff many a time. This is no
2 magic or mystery here going on.

3 MR. COWAN: Your Honor, I'll sit down.

4 THE COURT: Good.

5 Ms. McVey, get your order form. I'll sign
6 it --

7 MS. McVEY: Yes, ma'am.

8 THE COURT: -- and then provide the
9 materials for him as quickly as you can.

10 MS. McVEY: I will do that.

11 THE COURT: All right. Twenty-three, to
12 exclude expert hearsay opinions.

13 MS. McVEY: Your Honor, I think we agree
14 on that one.

15 MS. BUENO: We do.

16 THE COURT: All right. Now, what is 24?

17 MS. McVEY: That's it, Your Honor.

18 (A discussion was held
19 off-the-record.)

20 THE COURT: This is motion in limine by
21 the defense now to exclude or partially exclude
22 certain opinions of Dr. Longo.

23 We're not going to spend all day on this.
24 I'm not going to do it. I'll send you a list
25 of my rulings.

1 MS. BUENO: Your Honor, there's just a few
2 that we think need to be argued. If you'd like
3 to rule on the papers on any of these, we're
4 happy to have you do that, or we can go
5 through --

6 THE COURT: Yeah, but I have to even go to
7 do that. That's my problem.

8 MS. BUENO: I apologize.

9 THE COURT: J&J Omnibus, Number 1, media
10 reports about talc litigation presence,
11 asbestos and talc.

12 All right. Yes, ma'am.

13 MS. BUENO: Your Honor, are we looking at
14 the same thing, Number 1A, the omnibus for J&J,
15 which is media reports and articles?

16 THE COURT: That's just what I read.

17 MS. BUENO: Okay. I apologize.

18 Yes, Your Honor. So this is -- this is a
19 motion that just seeks to exclude on hearsay
20 grounds articles about Johnson & Johnson. We
21 called out one, in particular, which is a
22 Reuters article from 2018. It attaches some
23 documents and other things that may, indeed,
24 come into evidence, but the article, itself, or
25 anything about a report or writing is

1 absolutely hearsay.

2 THE COURT: I'm familiar with the article.

3 Ms. McVey.

4 MS. McVEY: Your Honor, as to the Reuters
5 article itself --

6 THE COURT: Yes.

7 MS. McVEY: -- generally, we would agree
8 that it doesn't come in with this exception.
9 If they're going to say, "It's not like we
10 stopped selling talc because of safety concerns
11 or this news article."

12 THE COURT: They can open the door. I'm
13 going to grant this, but if they open the door
14 by saying that they didn't stop selling talc
15 because of safety concerns, then a whole lot of
16 stuff comes in.

17 MS. McVEY: I'm sorry. Just before you
18 get there with that, there's also prior news
19 articles that we believe would come in for
20 notice or knowledge or other things like that.
21 I don't know that they're seeking to exclude
22 those.

23 THE COURT: Well, prior knowledge is going
24 to come in, but it can come in in a variety of
25 different ways. I've been asked to look right

1 now at specific articles about what they knew
2 and what they didn't know.

3 MS. McVEY: And the only one that we're
4 agreeing that shouldn't come in for notice or
5 some other reason is that Reuters article, and
6 that's that 2018 one.

7 THE COURT: What are you saying about
8 other articles?

9 MS. McVEY: I'm saying that you shouldn't
10 grant the motion as to those other articles
11 because they could come in for other reasons.
12 They haven't identified any other articles
13 they're talking about.

14 THE COURT: That's fine. I'm just saying
15 I'm going to rule on Reuters. That's it.
16 That's the one that I've got in front of me.
17 Okay.

18 1B, motion to exclude any reference to the
19 Golden Rule and Reptile Theory and all that.

20 I always exclude any kind of reference of
21 that sort. So, yes, granted.

22 MS. McVEY: Judge, I'm sorry. We agreed
23 not to the Golden Rule. They take this Reptile
24 Theory to mean that you cannot ask any safety
25 questions.

1 THE COURT: The Reptile Theory is that
2 crazy thing that the defense invented as a
3 scare tactic, if you were going to talk about
4 the Reptile Theory.

5 MS. McVEY: Right. I can do it the way
6 the motion is written, if you're granting it.
7 We're allowed to ask safety questions,
8 obviously. Companies have duties to put out
9 safe products and do safe things. And so we
10 want to be able to ask those questions, which
11 you've allowed us to do in every case.

12 THE COURT: All I'm doing is ruling out
13 the Reptile Theory, which is the level of
14 reptilian bar that's appealed to by certain
15 arguments. That has nothing to do with safety.
16 Safety is always something you can ask about.

17 I grant it on the basis of the Reptile
18 Theory and Golden Rule. And our state enforces
19 the Golden Rule, and I do, too. All right.

20 Johnson & Johnson Motion in Liminé
21 Number 2, exclude each and every exposure from
22 cumulative dose, causation --

23 FEMALE SPEAKER: I think you skipped 1C.

24 THE COURT: Where?

25 MS. BUENO: 1C through G.

1 THE COURT: 1C, motion to exclude any
2 reference to counsel's personal beliefs.
3 Granted.

4 Motion to exclude evidence and argument
5 that J&J improperly marketed or targeted
6 consumer general practice, characteristics
7 warranty. Why should I grant that?

8 MS. BUENO: Your Honor, what we're talking
9 about here are different documents suggesting
10 that Johnson & Johnson targeted for either
11 racial groups or women instead of men. And
12 they've been portrayed by plaintiffs in the
13 past about racism and sexism within the
14 marketing department at Johnson & Johnson.

15 Mr. Perry is a man. He's a white man.
16 There's just no reason to be bringing race into
17 the equation.

18 THE COURT: I agree with that. I'll grant
19 it.

20 MS. McVEY: Your Honor, just briefly.
21 They've not identified what documents they're
22 talking about. So in a vacuum --

23 THE COURT: Exactly. I will rule that I'm
24 not going to let targeted consumers that would
25 introduce the topic of race or gender. I'll

1 agree with that. I don't know what demographic
2 characteristics means, so I'm not going to rule
3 on that. But race or gender and improper
4 marketing to the -- well, projected to those
5 particular groups, I'm going to grant that.

6 Motion to exclude evidence in reference to
7 other plaintiffs' lawsuits and verdicts. All
8 right. Granted.

9 MS. McVEY: Your Honor, just to clarify on
10 that one, we do have adverse event reports from
11 Johnson & Johnson. They're not claims, of
12 course, but it's like when they report on a bad
13 outcome.

14 THE COURT: Yeah. Adverse events are
15 always going to be admitted. This thing is
16 talking about other claims or lawsuits.

17 MS. McVEY: The only time that you've let
18 other lawsuits in is if it has been notice for
19 knowledge, right, the first time they were sued
20 in a case alleging asbestos in their talc?
21 You, typically, let that in for notice for
22 knowledge.

23 THE COURT: I agree. Things that go to
24 notice can come in, but drilling down the
25 details of other claims and other verdicts, no.

1 I will grant on that.

2 1F, motion to exclude evidence of foreign
3 proceedings, including any evidence of talc
4 screening assessment.

5 I don't even know what that is.

6 MS. BUENO: Your Honor, the Health Canada
7 assessment was a Canadian regulatory document
8 related to ovarian cancer and non-cancer lung
9 effects. It's irrelevant. It's been trying to
10 be used in other cases.

11 We're seeking in this motion to exclude
12 anything from a foreign regulatory or
13 proceedings perspective. Particularly Health
14 Canada was discussed.

15 THE COURT: Well, I don't know what other
16 foreign materials you're talking about, and I
17 don't know whether they would be pertinent or
18 not.

19 With respect to Health Canada, what have
20 you got to say, Ms. McVey?

21 MS. McVEY: Banning chrysotile --
22 chrysotile is banned in 80 or 90 countries.

23 THE COURT: Oh, yeah. I've permitted
24 testimony about the bans on chrysotile.

25 MS. BUENO: That's not our motion, Your

1 Honor. Our motion is about foreign
2 proceedings, regulatory investigations that,
3 specifically, calls out Health Canada and the
4 like. It does not talk about bans.

5 THE COURT: Well, I'll grant on that, but
6 I'm not going to grant on just kind of a
7 general universe of other kinds of regulatory
8 issues that relate to what chrysotile is not
9 permitted to be sold. We've already had in
10 many of these cases the information that the
11 USA moved very slowly in this area as opposed
12 to many other countries that banned any use of
13 asbestos. You know, that goes to notice, that
14 kind of thing. All right.

15 Three, Johnson & Johnson's excluding each
16 and every exposure, cumulative dose, causation
17 opinions.

18 Jolly.

19 MS. BUENO: 1G was agreed to, Your Honor.
20 This was a specific hearsay statement by
21 Mr. Perry about something that he had overheard
22 from an unknown medical doctor at an oyster
23 roast.

24 MS. McVEY: We agreed to that.

25 THE COURT: Very good. All right.

1 Now we come to each and every exposure. I
2 have dealt with this in Jolly. I have been
3 affirmed in Jolly. So, Mitch, I don't know
4 what you can say, but...

5 MR. BROWN: Here's what I would say, Your
6 Honor. The plaintiff cites in the Jolly
7 opinion and the Glenn opinion, but the most
8 recent looking at this issue was the state
9 Supreme Court in Scapa.

10 THE COURT: Scapa Waycross, I'm very
11 familiar. I was affirmed in that one, too.

12 MR. BROWN: You were affirmed, and the
13 Court of Appeals was affirmed, and the Supreme
14 Court affirmed the Court of Appeals in a very
15 relatively short -- I think I set a record for
16 how quick they affirmed your case on that one.

17 However, it's important because what the
18 plaintiffs do is they say, all right, we're not
19 going to talk about each and every exposure.
20 But then, in fact, that's what the nature of
21 their experts really do. So the things such as
22 this, omitting material facts, opinions that
23 talk about there's no safe level, opinions that
24 say they're in direct conflict with the
25 controlling legal standard -- which Your Honor

1 was part of the Henderson case that set the
2 controlling legal standard -- opinions that are
3 divorced of all context.

4 The Court of Appeals in the Scapa case
5 adopted David Norton's Haskin case. And they
6 also adopted this case from Texas and cited it
7 with approval, Merrell Dow Pharmaceuticals
8 versus Havner, for what is required to be
9 proven for specific causation. And it says the
10 plaintiff has to do more than simply introduce
11 into evidence epidemiological studies that show
12 a substantially elevated risk. It goes on to
13 say they have to prove that they are studies
14 where similarities between himself and
15 individuals in the study include proof that he
16 was exposed to the same toxin, exposure to the
17 dose level was comparable to those in the
18 study, exposure to the toxin occurred before
19 the onset of the injury, the latency period of
20 the injury is consistent with the individuals
21 in the study.

22 We are just wanting a ruling from Your
23 Honor that their experts' opinions have to be
24 consistent with that law. That is required
25 law. The case that I would ask the Court not

1 to follow, which the Supreme Court declined to
2 say whether they liked it or didn't like it,
3 specifically, is the Rost case from
4 Pennsylvania. I think, Your Honor, that that
5 case runs afoul of your Henderson opinion. I
6 can't remember if you actually wrote it. I
7 think you were on it. But that case runs afoul
8 of the Henderson opinion about regularity,
9 proximity, and the frequency, and strays over
10 into allowing -- well, it depends on what type
11 of disease it is, and we might allow brief
12 exposure to be good enough.

13 That's not the test. That's not the legal
14 standard. And, Your Honor, we would
15 respectfully request that the Court adhere to
16 the standards enunciated in the Edwards versus
17 Scapa Court of Appeals and Supreme Court case,
18 which is the latest and greatest on this topic.

19 The last thing I'll say is that there has
20 been this cumulative dose testimony that the
21 Supreme Court cleared up what was allowed. And
22 in their opinion, they have one sentence in
23 here.

24 THE COURT: Here's what they say. This
25 Court has -- this is Scapa. This Court has

1 recently refused the cumulative dose theory
2 within each and every exposure theory, which is
3 what you're trying to do right now, concluding
4 that an expert opinion which states that a
5 certain -- quote, A certain exposure
6 contributes to an individual's cumulative dose
7 does not espouse the view that each and every
8 breath of asbestos is substantially causative
9 of mesothelioma. Quoting Jolly. Rather, this
10 Court viewed testimony regarding plaintiff's
11 cumulative dose of background information
12 essential for the jury's understanding of
13 medical causation, which must be based on
14 science. Edwards.

15 Also, Gardner against ADCO. That was one
16 of Jerry Hill's cases. He understands this
17 area very well. Rejected the admissibility --
18 a challenge to admissibility of Brody's
19 testimony. Same sort of thing, each and every
20 exposure.

21 I've ruled on this. The Supreme Court's
22 ruled on it several times. Jolly and Scapa are
23 two of the best cases on the subject. So I'm
24 not going to spend a lot of time on this.

25 MR. BROWN: Understood.

1 THE COURT: I am going to deny it, Mr.
2 Brown. Your position is preserved. And if you
3 want to argue to the Supreme Court, if it comes
4 to that, you know, I think what these --
5 this -- you cherrypick one little point out of
6 here and call it the Scapa opinion. But this
7 opinion talks about everything that contributes
8 to it. It uses the Helsinki criteria and so
9 forth. I am certainly not going to exclude
10 that.

11 MR. BROWN: Understood.

12 THE COURT: Okay.

13 MR. BROWN: Your Honor, let me make this
14 one point: The cumulative dose, all right, the
15 Supreme Court stated in the Edwards case that
16 it was proper for Dr. Frank to explain to the
17 jury that the amount of asbestos accumulates in
18 the body; the likelihood to develop
19 mesothelioma increases.

20 THE COURT: The Court in Scapa did not buy
21 your argument in any respect, whatsoever. They
22 agreed that what I charged in Jolly was the
23 correct way to look at it. And the way that I
24 managed it in Scapa, which was the same way,
25 was also correct.

1 So I'm, again, not buying that there's
2 been some big change in Scapa. I think it
3 exactly tracks what I and Gary Hill have been
4 doing for a long time with that position.

5 THE COURT: Number 4. Johnson & Johnson
6 defendant's motion in liminé, number 3, to
7 exclude all evidence of -- this is number --
8 exclude all evidence in reference to the
9 bankruptcy proceedings.

10 MS. BUENO: Yes, Your Honor. We are
11 moving to exclude any reference to bankruptcy,
12 because it's irrelevant. The jury's going to
13 have to decide whether or not Johnson &
14 Johnson's talcum powder products was a
15 proximate cause of Mr. Perry's cancer. That's
16 why we're here. This bankruptcy has absolutely
17 nothing to do with it. It would be irrelevant
18 and it would take us down a huge rabbit hole
19 and cause undue delay and waste the jury's time
20 and the Court's time.

21 And there's no reason that plaintiffs want
22 to offer this evidence, except for the purposes
23 of suggesting that Johnson & Johnson is a bad
24 actor. And I filed a reply brief last night,
25 which I'm sure Your Honor doesn't have and

1 hasn't had a chance to read. I think it was
2 yesterday, actually. But we pointed out what I
3 think is very important.

4 Plaintiffs had filed a response to this
5 motion, and then they filed an amended
6 response. And what they did in their amended
7 response, I think, is very notable. And I've
8 got both of them here if Your Honor doesn't
9 have it in front of you.

10 THE COURT: I'm looking at one of them
11 right here.

12 MS. BUENO: Is it the one that says
13 "response" or "amended response"?

14 THE COURT: I got it.

15 MS. BUENO: Okay. Which one are you
16 looking at, Your Honor?

17 THE COURT: I'm looking at both of them.

18 MS. BUENO: Okay. Great. So if you'll
19 turn with me to the "response," the original
20 one that was filed, and go to page 6, there's a
21 section C with two paragraphs under it. And if
22 you look at the "amended response" and go to
23 page 6, you'll see there's just one paragraph.
24 Plaintiffs amended their response to get rid of
25 the paragraph at the bottom where they said,

1 quote, Given that all relevant evidence is
2 admissible, plaintiff asks this Court to allow
3 them to introduce evidence of LLT bankruptcy
4 proceedings only to explain historical context
5 relating to LLT's existence and liabilities and
6 its relevance in this litigation. Unless J&J
7 opens the door and calls into question the
8 purpose of LLT bankruptcy proceedings,
9 plaintiffs do not intend to introduce evidence
10 showing J&J orchestrated the corporate
11 restructuring, sham bankruptcies and subsequent
12 events to avoid and limit its talc liabilities.

13 In other words, plaintiffs seek to admit
14 evidence relating to LLT bankruptcy proceedings
15 only to provide context and explain to the jury
16 how and why LLT is liable, not to show J&J is a
17 bad actor. That is the way plaintiffs
18 initially responded, and then rescinded by
19 amending and taking --

20 THE COURT: Let me tell you what's going
21 to happen here. They sued -- you all are the
22 ones that created this monster with this
23 bankruptcy, that was later dismantled, and with
24 this Texas two-step and all the rest of it. So
25 you created all these other corporations;

1 therefore, they had to sue all of the other
2 ones or you would have tried to step out of it
3 on the basis that they didn't sue the real
4 responsible party. So they sued all of them.

5 Now you don't want them to tell the jury
6 anything about these corporations and what they
7 are and when they were created and why.

8 MS. BUENO: Two responses: First of all,
9 Johnson & Johnson has never sought to avoid
10 liability. We have been front and center in
11 every single trial.

12 THE COURT: I'm not even going there.

13 MS. BUENO: Every single trial that has
14 gone to trial has been Johnson & Johnson
15 involved, not just these other entities.

16 But, number 2, we are absolutely willing
17 to enter into a stipulation, as we've done in
18 other cases, including the one that the same
19 plaintiff's counsel just tried in Oregon called
20 the Lee case, where we entered into a
21 stipulation to read the jury about what LLT
22 was. And we worked on language of that to talk
23 about the corporate structure, when the company
24 was created, what the purpose of it was, why
25 the name change was, et cetera.

1 We're very willing to enter into a similar
2 stipulation to provide that information. And
3 that answer is exactly what plaintiffs had
4 originally responded about seeking to admit
5 evidence only to provide context to explain to
6 the jury how and why LLT is liable. We will
7 stipulate to those type of corporate
8 restructuring and things about LLT. There's no
9 reason not to do it.

10 What we're seeking to avoid by this motion
11 is a side show of argument about why Johnson &
12 Johnson engaged in this type of restructuring.

13 THE COURT: Well, why did they engage in
14 this type of restructuring? To avoid
15 liability. That's the only reason they did it.
16 I was here with a bunch of these J&J cases on
17 my docket when all of that came down. And all
18 of them were stopped and stayed by a bankruptcy
19 that turned out to be not legitimate. And then
20 we went through the Texas two-step. That
21 turned out not to be legitimate.

22 These -- these corporations weren't
23 established for some theoretical idea of
24 restructuring. They were structured to try to
25 throw all the liability into a corporation that

1 had no assets so J&J can go on their merry way
2 forward.

3 MS. BUENO: And, Your Honor, obviously,
4 Johnson & Johnson disagrees with that
5 characterization. We have it in our briefing.
6 I know you've read it. The bankruptcy was
7 created to bring some certainty.

8 THE COURT: Bring some certainty? It was
9 created to stop all the litigation.

10 MS. BUENO: To bring certainty --

11 THE COURT: If you call that a euphuism
12 for bring certainty, that's what it was -- the
13 certainty that they wouldn't have to try these
14 cases that had been pending on dockets all over
15 the country.

16 MS. BUENO: Obviously, we disagree.
17 Plaintiffs have a fraud claim here.

18 THE COURT: Yes.

19 MS. BUENO: Bankruptcies cannot form the
20 basis of a fraud claim.

21 THE COURT: Well, there's some exceptions
22 to that now. Legitimate bankruptcies cannot be
23 the basis of a fraud. This didn't turn out to
24 be in that conventional framework.

25 MS. BUENO: Well, as addressed in our

1 briefing -- and I know Your Honor has read the
2 Third Circuit opinion --

3 THE COURT: I have.

4 MS. BUENO: -- there was not a finding of
5 bad faith. The Third Circuit, specifically,
6 indicated that there was not such a bad faith
7 finding. And I'll remind the Court of the
8 Noerr-Pennington doctrine, which I'm sure
9 you're familiar with, as well.

10 THE COURT: Very.

11 MS. BUENO: That a person cannot be sued
12 in tort for exercising First Amendment rights,
13 including the right to seek redress of
14 grievances in litigation, including bankruptcy
15 like this.

16 So here's -- here's -- Your Honor's
17 personal thoughts on all of this aside, from an
18 evidentiary perspective, it is not relevant --
19 the bankruptcy, itself, is not relevant in this
20 case.

21 THE COURT: Well, if you say there's no
22 skin in it, then why isn't it relevant?
23 They've got to have some explanation as to what
24 these companies are about.

25 MS. BUENO: They have no expert witness

1 who's going to come here and talk about
2 bankruptcy and how it works. This is all going
3 to be attorney argument. That's what's going
4 to happen. It's going to be all attorney
5 argument about how we're bad actors. We have a
6 right to seek redress in bankruptcy court.

7 THE COURT: I'm not going to even get into
8 all that.

9 MS. BUENO: There's no reason to. There's
10 no reason to turn this trial, which I know Your
11 Honor wants to move along --

12 THE COURT: I do. I'm going to tell you
13 what I'm going to do about this. I am going to
14 deny this motion, as it's made to exclude all
15 evidence and reference to LLT Management and
16 bankruptcy proceedings. I'm going to deny
17 that.

18 They are a party in this case. They are a
19 party that you created. You made them a party
20 in this case.

21 But here's what I will do: I will be
22 happy to look at the stipulation that you
23 entered into your argument and receive whatever
24 comments that Ms. Gross and Ms. McVey would
25 like to make about that. And if I decide that

1 that's something that would be a way to solve
2 this matter, I will be glad to use that.

3 MS. BUENO: Understood. Thank you, Your
4 Honor.

5 And my last comment is that the LTL, which
6 it was called at that time, created in October
7 of 2021, had nothing -- that corporate
8 restructuring can be discussed without what
9 happened next, which is the bankruptcy. So we
10 can have the jury understand that timing of the
11 creation of LTL, and that the liability were
12 put there, and the creation of the new
13 entities. That is all fine. We are not
14 suggesting that needs to be excluded. But what
15 we're asking to be excluded is the bankruptcy,
16 itself, because that is the part --

17 THE COURT: And I'm denying that right
18 now, but I'll see what your stipulation says.

19 MS. BUENO: Thank you, Your Honor.

20 THE COURT: And if I can live with that,
21 that's what I'll do.

22 MS. BUENO: That's what we'll do. We'll
23 get that for you.

24 THE COURT: All right. Johnson & Johnson
25 Defendant's motion in liminé to preclude

1 reference to or reliance on defendant's net
2 worth and sales outside of South Carolina.

3 Well, I bifurcated these matters, so I
4 don't -- no reference is made at all until you
5 get to the punitive damages, if you get there.
6 And the way my bifurcation works is the way
7 most people's works. I have a verdict form,
8 and at the end of the verdict form, it says, if
9 you find -- essentially, if you find for the
10 plaintiff that the conduct was negligent,
11 then -- or whatever the formula works. If you
12 find for the plaintiff in that regard, then
13 answer this question: Was the conduct willful,
14 wanton and reckless? If they answer yes -- and
15 that's all I ask them to do; yes or no. If
16 they answer yes, then we go to the second
17 phase, which is the punitive phase. And when
18 the punitive phase comes, yes, we will give
19 them information, and I'll require y'all to
20 supply the information about all of these
21 corporations and their net worth and matters
22 and all that kind.

23 Sales outside South Carolina, I don't
24 generally deal with that. I've never been
25 asked or allowed the jury to discuss sales out

1 of South Carolina. But net worth, well,
2 certainly. Yes. If it's in the punitive
3 phase.

4 MS. PEPKE: The South Carolina piece was
5 an alternative argument. In the first
6 instance, you're right on. We're talking about
7 bifurcation, holding the financial net worth --

8 THE COURT: We're going to bifurcate. I
9 do that always.

10 MS. PEPKE: And for this Court to follow
11 Brown, the Brown case, about what financial
12 information is relevant. We actually just
13 deposed their economist --

14 THE COURT: I'm very familiar with the
15 Brown case.

16 MS. PEPKE: And we just want the
17 irrelevant financial information excluded that
18 he went through, which was like gross sales.
19 everything Brown said that can't be
20 mentioned --

21 THE COURT: Well, as I say, I am very
22 familiar with Brown.

23 MS. PEPKE: Thank you.

24 MS. McVEY: Your Honor, I told them that
25 we agreed to the net worth information only

1 comes in if there's a punitive finding. But
2 their motion goes much further and wants to
3 limit us to any out-of-state sales or conduct.
4 And, you know, when you look at BMW versus Gore
5 and State Farm versus Campbell, they don't
6 limit you to what happened.

7 THE COURT: Well, that's true.

8 MS. McVEY: You know, they really don't.
9 And, in fact, I think it was Gore that said
10 lawful out-of-state conduct may be probative
11 when it demonstrates that the deliberateness
12 and culpability of the defendant's actions in a
13 state where it is tortuous, but that conduct
14 must have a nexus to the specific harm suffered
15 by the plaintiff. And of course, here, it
16 would, right?

17 THE COURT: Yeah.

18 MS. McVEY: The powder contained asbestos,
19 which they sold, and they hid all this stuff.
20 All the other evidence is coming in because
21 we've got to prove reprehensibility to get a
22 punitive case, but, also, with regard to fraud.
23 And so the jury is going to be charged on that.
24 If it's just about the net worth number, we
25 agree that comes in later, but we don't agree

1 that we're limited just to net worth of sales
2 in South Carolina.

3 THE COURT: I understand your contention,
4 and certainly on fraud and reprehensibility.
5 Definitely find that would come in. That will
6 be subject to what it is you're actually going
7 to propose, and I have to look at that and see.

8 MS. McVEY: Yes, ma'am. Thank you.

9 THE COURT: All right.

10 Number 5, summary evidence. Exclude
11 plaintiffs' summary evidence chart. The
12 Decades of Evidence Chart, I've seen that many,
13 many times.

14 MR. COWAN: Your Honor, I have not seen a
15 ruling from this Court on that, if it's ever
16 been challenged before, but we do challenge it
17 here.

18 There are a number of issues. The first
19 and foremost at this point, Your Honor, is that
20 I have no idea which chart they're going to
21 use. There seem to be about four or five or
22 six different versions of the same thing.

23 THE COURT: Well, if we're talking
24 theoretically, then I'm not going to deal with
25 anything about that until I see what you're

1 talking about.

2 MR. COWAN: Okay.

3 THE COURT: Okay. I'm not -- I'm going to
4 deny the motion based on a theoretical
5 conversation. If you've got an actual chart
6 that you're fixing to offer, then it better be
7 discussed before we try the case is all I have
8 to say.

9 MR. COWAN: There is one on the current
10 motion to pre-admit that is different than any
11 motion I've ever seen, so --

12 THE COURT: Well, you're going to have to
13 bring it to my attention. And if you do, I'll
14 rule upon it.

15 MS. McVEY: And I'll move that they
16 pre-admit so they can see what we're going to
17 do. (sic)

18 THE COURT: Right, right.

19 Johnson & Johnson motion in liminé
20 number 6. Exclude all evidence of and
21 reference to alleged adverse reactions to
22 talcum powder not at issue, including ovarian
23 cancer.

24 MS. BUENO: Your Honor, this motion is
25 related to ovarian cancer, but also to infant

1 asphyxiation and other types of adverse events
2 related to -- allegedly related to talcum
3 powder use. I'll start with ovarian cancer,
4 because it forms the bulk of the motion.

5 We believe ovarian cancer related to talc
6 should be out for a variety of reasons. First,
7 there's a different mechanism of action that's
8 alleged between ovarian cancer and talc use,
9 and mesothelioma and talc use. It's a totally
10 different disease. Certainly Mr. Perry, as a
11 man, does not have ovarian cancer risk. It's a
12 different source, different science. All of
13 this is different. Part of our motion seeks to
14 exclude IR reclassification of talc recently
15 into group 2A, which was related to talc,
16 itself, not talc including or involving
17 asbestos.

18 And so the ovarian cancer science is very
19 different from that related to mesothelioma.

20 Courts routinely grant this motion and
21 include ovarian cancer, discussion, documents,
22 and allegations in cases involving
23 mesothelioma. We ask the Court to do the same
24 thing here, because it would be very unduly
25 prejudicial for plaintiffs to allege that talc

1 causes all these other diseases, including and
2 not limited to ovarian cancer.

3 It would also cause significant undue
4 delay if we had to get into rebutting plaintiff
5 experts on why there is no science to support
6 allegations of ovarian cancer.

7 Now, I'll share with Your Honor that
8 there's two case-specific issues that might
9 overlap with ovarian cancer in this case. And,
10 first, Mr. Perry has some testimony about
11 having concern about talc after seeing TV ads
12 related to ovarian cancer and talc. So that is
13 one way that this may come in. Another way
14 that plaintiffs may attempt to get it in is the
15 fact that some medical records have reference
16 to Mr. Perry's mother potentially having
17 ovarian cancer, which, through discovery, we
18 believe is not the case; that her cancer was
19 limited to lung cancer and, perhaps, uterine
20 cancer. But because it is in the medical
21 records, we have concern that there will be, at
22 least, a speculation and suggestion that his
23 mother used a lot of talc, too, and had ovarian
24 cancer.

25 So what we're seeking to do here is to

1 exclude ovarian cancer entirely from this
2 trial, because it is not relevant and it is
3 unduly prejudicial, but then also specific
4 references that have been discussed in
5 Mr. Perry's case.

6 THE COURT: Okay.

7 MS. BUENO: So that's ovarian. And then
8 there's also a second prong to that. Do you
9 want me to address that now or turn it over?

10 THE COURT: What second prong?

11 MS. BUENO: The second prong is exhibits
12 related to infant asphyxiation. And we
13 actually include three exhibits that are
14 attached, Exhibits H, I and J. H and I are
15 related to allegations and specific documents
16 that have to do with concerns about infants
17 breathing in the talc and having problems with
18 it. And there's -- Exhibit H is an e-mail from
19 a gentleman named Todd True that talks about
20 concerns with keeping Johnson's Baby Powder on
21 the baby aisle because of these infant
22 asphyxiations.

23 THE COURT: Well, that's one of J&J's only
24 documents.

25 MS. BUENO: It is. This is irrelevant,

1 prejudicial argument. It has nothing to do
2 with this case to be talking about infant
3 inhalation of powder.

4 THE COURT: You know, the touchstone of
5 liability in these type cases is based on
6 foreseeability. All this goes directly to
7 foreseeability.

8 MS. BUENO: Infant asphyxiation has
9 nothing to do with alleged asbestos.

10 THE COURT: Well, let's put infant
11 asphyxiation to the side for a minute. All the
12 rest of this stuff about ovarian cancer is very
13 directly related to foreseeability. This is --
14 the contention is -- and it's a contention
15 based out of your records that y'all knew for
16 years; that there are cases in which the
17 ovarian cancer was attributed to asbestos in
18 your products.

19 MS. BUENO: Well, that's the concern here,
20 is because the science and the allegations
21 right now related to ovarian cancer are not
22 asbestos-related, Your Honor. And we see that
23 in the IR reclassification that we attached as
24 Exhibit J and we're seeking to exclude.

25 The science here relates to talc not

1 containing asbestos, and allegations.

2 THE COURT: I mean, we're going to get
3 into a trial in a trial --

4 MS. BUENO: Exactly.

5 THE COURT: -- trying to show that y'all
6 have known the foreseeable risk of your
7 product, and that is relevant to their
8 arguments. That's kind of a foundational sort
9 of thing. And this is material right out of
10 your own records.

11 MS. BUENO: And, again, the argument here
12 is relevance to Mr. Perry, who's, obviously, a
13 male. Ovarian cancer issues are not relevant
14 and then it's also unduly prejudicial, as well
15 as undue delay, because it would create a trial
16 in a trial.

17 THE COURT: Shoot, if Mr. Perry was
18 Ms. Perry, you'd be making the same argument
19 about ovarian cancer. You just didn't want to
20 exclude it on the basis of sex. You wanted to
21 exclude it on the basis of it's
22 highly-prejudicial, and that's what you're
23 really saying.

24 MS. BUENO: Well, I think it would be
25 irrelevant in any case, regardless of the

1 plaintiff's gender. But I think here there's
2 an additional reason of relevance, certainly.

3 THE COURT: Okay. Well, I know Brown
4 versus Ford Motor Company very well, and I am
5 going to deny the motion.

6 All right. Johnson & Johnson's motion.
7 Defendants' motion in limine to preclude
8 reference to or reliance on inmate studies.

9 MS. McVEY: We agree on this one.

10 THE COURT: Agreed. Granted.

11 Johnson & Johnson, number 8, exclude
12 evidence and argument regarding certain
13 advertising campaigns that focused on babies
14 and the mother-infant bond.

15 MS. BUENO: Your Honor, this is also
16 relevance and a 403 argument.

17 We anticipate plaintiffs are going to show
18 the jury a lot of documents. In fact,
19 Plaintiff's Exhibit 1 on their exhibit list
20 that we got late last night is a Power Point
21 called Baby Camp that talks about the baby
22 franchise.

23 Mr. Perry never used Johnson's Baby Powder
24 or any other type of talc, for that matter, as
25 a child -- I mean, as an infant.

1 The evidence is he started using it in
2 1974 at the age of five. So we don't have a
3 situation here of a baby and mother type use.
4 Mr. Perry does not allege any use during
5 diapering of other babies.

6 It's simply irrelevant to have evidence
7 related to this alleged J&J effort to develop a
8 mother-baby bond. It's not relevant in this
9 case, and we ask for it to be excluded on that
10 basis.

11 THE COURT: I understand. Well, all
12 right. They contend that the foundation of
13 their branding approach was the mother-baby
14 image of Johnson's Baby Powder. And they say
15 that that appeal is a golden egg conceptual
16 table use, the essence of Johnson & Johnson's
17 marketing from the very beginning. Trust us
18 because we developed this for babies, the most
19 vulnerable that that can be. And that's why
20 they want to use it. And I think that's
21 legitimate. That is what the advertising
22 campaign was.

23 You say it's not relevant, because you
24 can't show he was a baby when he used it.
25 That's not the point. The point was what

1 projection and image did you put before the
2 public about the reliability and trust that you
3 can put in the product, when it turned out in
4 your internal records it was known for years it
5 had asbestos in it.

6 So -- and your own records say, we've got
7 to be sure this doesn't get out because our
8 image is the mother-child image that we are
9 projecting. You have internal records that say
10 that. They're going to be able to use that.

11 MS. BUENO: Your Honor, I hear you, and I
12 hear your ruling. I would disagree with the
13 fact that there is any document that says we
14 have to be careful this doesn't get out,
15 because Johnson & Johnson was not aware of
16 these allegations at that time. We were aware
17 of the allegations, but there is nothing to
18 suggest there was knowledge of asbestos in talc
19 that we were trying to hide or conceal. I know
20 Your Honor disagrees. I know Your Honor
21 disagrees.

22 THE COURT: It was brought to my attention
23 here, and in other cases I've tried, that talk
24 about that, specifically, in the internal
25 memos, about what to be sure is kept

1 confidential and what is not. And it's based
2 on not wanting the general public to have the
3 image of this is the safe baby company
4 interfered with by showing that there's
5 asbestos in this material.

6 Now, your projection all along is, well,
7 it's not enough to cause any problem, this kind
8 of thing, because it's changed over time. But
9 you are stuck with what the internal records
10 show. Dr. Hopkins had to deal with the very
11 same stuff. He was the expert of -- or the
12 corporate rep that y'all had. I am going to
13 deny that motion.

14 Motion number 9, publish pleadings to the
15 jury. Denied. Smith versus Till.

16 Motion number 10, exclude all reference to
17 the interagency working group on asbestos in
18 consumer products.

19 MR. COWAN: Your Honor, are you familiar
20 with the white paper on that?

21 THE COURT: Yes.

22 OFFICIAL COURT REPORTER: With the what?
23 I'm sorry.

24 THE COURT: The white paper.

25 MR. COWAN: I was asking if the Court was

1 aware of the white paper.

2 THE COURT: IWGACP, which is the
3 Interagency Working Group on Asbestos in
4 Consumer Products. They have minutes, and they
5 also have a white paper, and that's what he's
6 talking about.

7 MR. COWAN: Yes. Your Honor, so we would
8 seek to exclude reference to the white paper,
9 primarily as the plaintiff's experts are apt to
10 state -- or the plaintiff's counsel are apt to
11 argue that the white paper is somehow the
12 FDA's, or some other governmental agency's,
13 position. That is simply just not the case.
14 And it says so at the beginning of the
15 document.

16 And the other issue is that -- that it is
17 hearsay, and, therefore, it's not admissible
18 evidence. And it's certainly not a public
19 record, because no public agency has claimed
20 ownership of it. It is simply a working
21 document of potential recommendations from a
22 group of persons to agencies in the United
23 States, none of whom have adopted the
24 recommendations that are provided --

25 THE COURT: The Interagency Working Group

1 was created by whom?

2 MR. COWAN: A number of different agencies
3 provide their representative.

4 THE COURT: Federal agencies, correct?

5 MR. COWAN: Correct.

6 THE COURT: Created this working group,
7 and they issued a white paper?

8 MR. COWAN: That is correct.

9 THE COURT: And then the FDA got a lot of
10 importunate from everybody about this. And the
11 FDA said, Neither the executive summary nor any
12 of the presentations at the public meeting by
13 members of the working group represent the
14 proposed or preliminary recommendations of the
15 policies of the FDA or any other federal
16 agency.

17 MR. COWAN: That's correct.

18 THE COURT: Now, that's what they said
19 about it. That's certainly what can be said
20 about it if any reference is made to it here.
21 But, innocently, a study group, that is what it
22 is, a collection of agency personnel who looked
23 at certain issues and made a white paper
24 report, just like articles written that people
25 rely on for expressing opinions. I don't

1 get --

2 MR. COWAN: I understand, Your Honor. I
3 would push back a little bit here that this
4 white paper is not a published peer-reviewed
5 article. It has not gone, specifically,
6 through the peer review process yet. It has
7 yet to do so. And so, this is not a
8 peer-reviewed article, just like any other. It
9 is also not, as Your Honor stated, the position
10 of any --

11 THE COURT: -- of any kind. It is simply
12 a working group composed of a lot of different
13 agencies that got together and studied issues
14 and made a report.

15 MR. COWAN: And made a recommendation.

16 THE COURT: And made recommendations.

17 MR. COWAN: But that no federal agency
18 actually adopted.

19 THE COURT: Well, I think that can be made
20 clear if it's discussed with the jury. I would
21 not preclude any reference to it.

22 MR. COWAN: Well, I would suggest, at a
23 bare minimum, that it's not admissible
24 evidence, much like a published paper isn't
25 going to go back to the jury.

1 THE COURT: I don't agree with that. I
2 think they probably have witnesses that will
3 talk about it.

4 MR. COWAN: I think it's on their exhibit
5 list.

6 THE COURT: I will deny excluding any
7 reference to it or argument about it, but I'm
8 certainly not going to admit it into evidence.

9 MR. COWAN: Okay.

10 I think the last one --

11 MS. BUENO: Can I say something?

12 MR. COWAN: Go ahead.

13 MS. BUENO: Your Honor, this may be
14 inappropriate, and if it is, you'll tell me to
15 sit down. But in light of your ruling, I would
16 ask you to reconsider your ruling on
17 plaintiffs' motion in liminé, number 19, which
18 was the 1986 FDA citizen's petition, which is
19 similar to the Interagency Working Group, which
20 you just ruled is admissible, was not a
21 government endorsement, as we've discussed.

22 THE COURT: Wait a minute. Hold it. Hold
23 the phone. I don't even know what you're
24 talking about. Are you talking about the
25 Douillet --

1 MS. BUENO: I am. I am.

2 THE COURT: I said that couldn't come in.

3 MS. BUENO: You did. You did, but what
4 I'm doing is --

5 THE COURT: That's two people talking
6 about this issue.

7 MS. BUENO: It is not. And that's where I
8 think the Court doesn't understand what it is.

9 That was the title of the plaintiffs'
10 motion, but it was an FDA response to a
11 citizen's petition. It was written to the
12 person who -- who submitted the petition.

13 THE COURT: I'm real familiar with that
14 claim, and it's got more explanations on it.

15 MS. BUENO: Okay. I understood. I heard
16 what you just ruled about the white paper and
17 how it was not a government endorsement.

18 THE COURT: Yeah, and here I am trying to
19 give you a little something, and --

20 MS. BUENO: But you just allowed it to
21 come in against our request.

22 THE COURT: Yes, ma'am, with some caveats
23 that this couldn't -- it couldn't be viewed as
24 a government position on anything, which is the
25 real thing you would like said about it. And I

1 agree with that. It's simply a group of people
2 that got together and issued a white paper.
3 It's not coming into evidence, but it can be
4 relied upon by people when they talk about it.

5 Douillet was an issue of having that not
6 come into evidence, that letter, and I said no.

7 MS. BUENO: But we also requested it to be
8 able to have people rely on it and talk about
9 it. And my understanding from your ruling --

10 THE COURT: I am not going to recover
11 covered ground.

12 MS. BUENO: Thank you, Your Honor.
13 Understood.

14 MR. COWAN: I believe number 11 is
15 region 9.

16 THE COURT: Excluded evidence of the
17 Region 9 response.

18 MR. COWAN: You're familiar with the
19 Eldorado story, Your Honor?

20 THE COURT: Yes.

21 MR. COWAN: Okay. This is the Region 9
22 response related to that story.

23 The EPA, as you know, has regional
24 offices. This is a 2006 response to an R.J.
25 Lee report or a response to the initial report.

1 It is -- it's -- plaintiff is expected to
2 offer it as a preliminary report written by
3 this office as evidence that the EPA --

4 THE COURT: What they're trying to do is
5 something we've talked about before. It's this
6 old business of these non-asbestiform cleavage
7 fragments versus asbestiform. And the EPA said
8 that they will distinguish --

9 MR. COWAN: Actually, the EPA never said
10 that. The EPA Region 9 office in 2006 said
11 that.

12 THE COURT: Well, whatever the Region 9
13 response is, the issue is whether evidence
14 about that can be put forward. I don't even
15 know what you're referring to. You're
16 referring to a document that you're trying to
17 exclude or a reference to it.

18 MR. COWAN: Yes, Your Honor. It's a --
19 it's a preliminary report --

20 THE COURT: You're talking about a
21 preliminary report, you don't want it to come
22 into evidence?

23 MR. COWAN: That's correct.

24 THE COURT: It's not going to come into
25 evidence. It can be referred to and I'm not

1 going to exclude that.

2 MR. COWAN: Thank you.

3 THE COURT: All right. Johnson & Johnson
4 motion in limine number 12, to preclude
5 references to or reliance on articles by
6 Drs. Moline, Emory, and Gordon.

7 MS. BUENO: Your Honor has ruled on this
8 and you've denied this motion --

9 THE COURT: That's correct.

10 MS. BUENO: -- in the past.

11 THE COURT: All right. Johnson &
12 Johnson's motion to partially exclude the
13 opinions of Dr. Haber.

14 MS. BUENO: Your Honor, Dr. Haber, as you
15 well know, is the pulmonology expert that
16 plaintiffs will offer. He is the one and only
17 expert who will give a causation opinion in
18 this case. He is qualified to give the
19 pulmonology opinions that are within his
20 wheelhouse. We are not seeking to exclude
21 anything that is within his specialty.

22 However, we do have objections to him
23 speaking about things that are entirely outside
24 of his qualifications.

25 What plaintiff seeks to do with Dr. Haber

1 is to use him as the expert who will be a
2 conduit for all company documents, as well as
3 the alleged -- or the story about alleged
4 asbestos in talc.

5 The Decades of Evidence Chart, which Your
6 Honor is so well familiar with, they seek to
7 offer that chart through Dr. Haber.

8 Dr. Haber has been excluded by another
9 court, as outlined in our brief, in Louisiana
10 State Court, where that Court held Dr. Haber
11 has no education, qualifications or experience
12 in testing and analyzing the content of talc
13 for contamination of asbestos. It would be
14 inappropriate to allow him to opine beyond his
15 qualifications.

16 We are asking Your Honor to make a very
17 similar ruling here, and to exclude Dr. Haber
18 from talking about testing and analyzing the
19 content of talc for contamination of asbestos.

20 Dr. Haber is admittedly someone who has
21 not used an XRD, SEM, TEM or PLM microscope.
22 He has never, personally, tested Johnson &
23 Johnson talcum powder or any other powder.

24 He's never, personally, looked at
25 materials to determine whether or not they

1 contained asbestos.

2 He's never used any of the different
3 microscopes that he will criticize in this case
4 and talk, specifically, about Johnson & Johnson
5 should have done this; should have done that;
6 should have looked at this; should have looked
7 at that, when he has no qualifications to offer
8 those opinions.

9 In fact, recently, he was asked about the
10 types of testing for asbestos, and his answer
11 to that was, "I'm not your guy to start telling
12 you what tests to do. I don't do those tests."
13 But yet despite his admitted lack of
14 qualifications, plaintiffs seek to offer him
15 for a variety of opinions, and, specifically,
16 on page 2 of our motion, we outline some of
17 those opinions, including, but not limited to,
18 the Decades of Evidence Chart.

19 The point here, Your Honor, is that
20 plaintiff has experts. Dr. Longo has done
21 testing. Dr. Bailey has done testing. They
22 have experts that will have qualifications to
23 allow them to opine on asbestos testing and
24 asbestos contamination. Dr. Haber just simply
25 is not that person. And he should be precluded

1 from testifying about different definitions of
2 asbestos, about different product sources,
3 asbestos content, and the list goes on and on.
4 And we know from recent trials, that's exactly
5 what plaintiffs seek to do with Dr. Haber.
6 With that, I'll stop unless you have any
7 questions.

8 THE COURT: Right.

9 MR. ADAMS: Your Honor?

10 THE COURT: Yes.

11 MR. ADAMS: Dr. Haber is our specific
12 medical causation expert. They like to refer
13 to him as a pulmonologist, but his designation
14 is our specific causation expert. And just
15 like the plaintiffs in this case, defense has a
16 specific causation expert, as well. And so
17 what happens --

18 THE COURT: Dr. Haber is a pulmonologist
19 who has treated people with mesothelioma; isn't
20 that correct?

21 MR. ADAMS: That is correct.

22 THE COURT: All right. And out of that
23 treatment experience, he is using information
24 about the occupational and exposure history.

25 MR. ADAMS: Absolutely.

1 THE COURT: And information about the
2 chemistry and geology and so forth to examine
3 whether a person has mesothelioma, right?

4 MR. ADAMS: As an occupational medicine
5 doctor who has to investigate --

6 THE COURT: Right, okay.

7 MR. ADAMS: -- the sources of the disease,
8 the cause of the disease, and the treatment for
9 that specific problem.

10 THE COURT: Right.

11 MR. ADAMS: Yes. He's relied on all those
12 specialties, just like a standard is routinely
13 done in cases like this.

14 THE COURT: Right.

15 MR. ADAMS: Their medical causation expert
16 relies on all the same things as Dr. Haber.

17 THE COURT: And the difference between
18 Dr. Haber, for example, and Mr. Sanchez, for
19 example, is that Mr. Sanchez knows nothing
20 about the treatment of patients who have
21 mesothelioma, right?

22 MR. ADAMS: Because he's not a medical
23 doctor.

24 THE COURT: And beyond that, has no
25 knowledge about the treatment of people with

1 mesothelioma; doesn't know anything about
2 mesothelioma. Haber's foundational knowledge
3 base is that and he relies on certain things to
4 diagnose and treat occupational mesothelioma
5 patients, correct?

6 MR. ADAMS: Correct. And he's published
7 on it, as well.

8 THE COURT: Yes, sir. And he's published
9 on it. And his field of knowledge that he
10 relies upon is a field of knowledge commonly
11 relied on by pulmonologists who treat
12 occupationally-contracted mesothelioma, right?

13 MR. ADAMS: That's correct.

14 THE COURT: All right.

15 MS. BUENO: Your Honor, Dr. Weill, you
16 excluded earlier his case-specific causation
17 opinions for Mr. Perry. Dr. Weill is also a
18 pulmonologist. Dr. Weill has also treated
19 patients with mesothelioma. He has observed
20 and considered their occupational and exposure
21 history, as well as their asbestos exposure.
22 All of the same things --

23 THE COURT: Why did I -- did I exclude
24 Weill totally? No. I simply said, Weill
25 cannot express an opinion about Mr. Perry's

1 condition and state that it is idiopathic or
2 spontaneous. Isn't that what I ruled?

3 MS. BUENO: You did, but here's the
4 problem with what --

5 THE COURT: I'm not going to get into
6 revisiting all my other rulings every time I
7 come to another one.

8 MS. BUENO: Dr. Haber has done nothing in
9 his analysis of this case that Dr. Weill didn't
10 do. He has no qualification that Dr. Weill
11 doesn't have. Both of them considered all the
12 same things --

13 THE COURT: Yes, but he is dealing with a
14 diagnosed mesothelioma. And he is simply
15 offering opinions about that diagnosed
16 mesothelioma born out of his experience
17 treating mesothelioma.

18 Dr. Weill is trying to express an opinion
19 that it's spontaneous or idiopathic, but he
20 knows nothing about that situation as it
21 affects Mr. Perry.

22 MS. BUENO: That's not true. Dr. Haber
23 and Dr. Weill know the exact same thing. They
24 both relied on reviewing deposition
25 transcripts. They both relied on and reviewed

1 the occupational history, the alleged asbestos
2 exposure, and Dr. Haber wants to come up on the
3 stand and say, "I have reviewed this and I
4 conclude it's caused by talcum powder."

5 THE COURT: Yes.

6 MS. BUENO: Dr. Weill wants to come and
7 say, "I've looked at all the same things --"

8 THE COURT: And I don't know what caused
9 it.

10 MS. BUENO: No. He's going to say --

11 THE COURT: I don't know what caused it.

12 MS. BUENO: -- I believe -- this is what
13 he said: He says, if it is asbestos-related,
14 it's not caused by talcum powder because
15 there's not a level of asbestos in talcum
16 powder, even believing plaintiffs that would be
17 causative. So if it's asbestos-related,
18 there's another source, or it could be
19 naturally occurring and I, Dr. Weill, have
20 treated patients who I have personally
21 diagnosed with naturally occurring
22 mesothelioma.

23 Dr. Weill has done that in his clinical
24 practice. He just testified about that at his
25 recent depo. And in those patients, he has

1 examined their occupational history. He's
2 looked for every exposure, and he hasn't
3 identified one, and he has made the same
4 conclusion: If you do not have an
5 asbestos-related mesothelioma, then I will lead
6 to a reasonable degree of medical certainty
7 that that is naturally occurring, because we
8 know it happens. And there's not a doctor who
9 gets up on the stand who's going to say, there
10 are not cases of naturally occurring
11 mesothelioma.

12 So, Your Honor, to allow Dr. Haber with
13 the same qualifications --

14 THE COURT: Okay. It's 5:00 now. I'm not
15 going to revisit my ruling of Dr. Weill.

16 MS. BUENO: This is on Dr. Haber.

17 THE COURT: This is on Dr. Haber now.

18 MS. BUENO: I seek to exclude a causation
19 opinion related to Mr. Perry by Dr. Haber,
20 because there's absolutely no reason he should
21 be able to say it's talcum powder related.

22 THE COURT: All right. I hear you.

23 MR. ADAMS: In response --

24 THE COURT: It's 5:00. We still got a
25 mountain of stuff to do. Now, come on.

1 MR. ADAMS: No, I'm good.

2 THE COURT: I deny the motion.

3 All right. The next thing I've got is
4 Vi-Jon. Have we already done that? Vi-Jon's
5 motion in liminé to exclude the testimony of
6 Lonnie Long's use of talcum powder. Did we
7 already do that?

8 MR. McCONNELL: No, Your Honor, we did
9 not. And, Your Honor, we also have another
10 dreaded Omnibus motion, but my proposal -- and
11 there's 35 subparts, but here's my proposal:
12 We talked with the plaintiff lawyers. We
13 agreed on a lot of them. And there's some --
14 I'm going to withdraw, and then I'm going to
15 try to make as few remaining as possible. And,
16 Your Honor, they are much simpler than what
17 you've been dealing with. And my proposal
18 would be to submit them to you with your
19 experience and knowledge. You will find them
20 very easy to rule on, and that's it. We'll
21 just go with it.

22 THE COURT: Hey, I like that.

23 MR. McCONNELL: Okay.

24 THE COURT: Let's just do it that way.

25 MR. McCONNELL: All right. So let me look

1 at our Omnibus motion.

2 MS. McVEY: Do you want to go through them
3 now or do you want to --

4 THE COURT: Do them now? I thought you
5 said you were going to --

6 MR. McCONNELL: I'm going to tell you now
7 which ones I'm withdrawing and that are agreed
8 to.

9 THE COURT: How about you all just --

10 MS. McVEY: Yeah. I'll --

11 MR. McCONNELL: That's fine.

12 THE COURT: How about you all just do that
13 and submit them to me and I'll --

14 MR. McCONNELL: That's fine. Yeah, let's
15 do that.

16 And then, Your Honor, in addition to the
17 Omnibus, and Your Honor was just starting to
18 mention the others, we had a motion to exclude
19 testimony of Lonnie Long's talc use outside the
20 presence of Michael Perry. And then we had the
21 motion to exclude Dr. Longo.

22 Your Honor, your ruling in denying our
23 motion for summary judgment, I believe, takes
24 care of --

25 THE COURT: Yes, it does.

1 MR. McCONNELL: -- of that motion, as
2 well.

3 And then we had a motion to exclude
4 evidence regarding duty-to-warn. That was just
5 premised on the notion that there's no evidence
6 that we ever knew there was asbestos in our
7 talc.

8 And then we have two other motions that
9 really go together, excluding products not
10 identified in discovery and excluding products
11 not at issue. That whole point is just of all
12 the various products we made that contain talc,
13 private label products, the only one at issue
14 in this case is Equate and we think it ought to
15 stay that way. That's it.

16 THE COURT: All right.

17 MR. McCONNELL: Thank you, Your Honor.

18 MS. McVEY: Just briefly in response to
19 that. If it were to come in, other products --
20 I don't know that it would -- we would need to
21 show notice of some defect (sic) if we had that
22 kind of evidence. I'm just not sure --

23 THE COURT: I don't either. You-all give
24 me a chart on that. Okay.

25 MR. McCONNELL: Thank you, Your Honor.

1 THE COURT: Now, all right. Now, is that
2 the end of it?

3 MS. BUENO: No, Your Honor. I think
4 there's three motions from Johnson & Johnson
5 that you might have overlooked. We have a
6 motion to exclude Dr. Madigan.

7 THE COURT: Hang on.

8 MS. BUENO: I think those came in later.
9 They were delivered by us. They were not part
10 of the original notebook.

11 (A discussion was held
12 off-the-record.)

13 THE COURT: All right. Dr. Madigan.

14 MS. BUENO: Okay. Dr. Madigan.

15 THE COURT: A little small thing like this
16 at 5:00 in the afternoon. I want you to
17 summarize this for me.

18 MS. BUENO: I'm going to summarize it
19 quickly, Your Honor. I'm assuming that you
20 have experience with Dr. Madigan?

21 THE COURT: Yes, I have.

22 MS. BUENO: He has a new opinion that is
23 relatively new to him. It's a general
24 causation opinion, which he previously did not
25 offer. You're aware of his prior testimony

1 regarding his probability assessment about
2 bottles. You're aware of his trends data.
3 We've moved on both of those. I'll stand on
4 the papers. The only issue I'd like to ask for
5 argument on relates to this general causation
6 opinion.

7 He is offering a general opinion that he
8 says, quote, There is sufficient evidence that
9 lifetime asbestos exposures, as found in
10 regular use of cosmetic talc, can cause or
11 contribute to the development of pleural and
12 peritoneal mesothelioma.

13 This opinion should be excluded first on
14 qualifications. Dr. Madigan is a statistician.
15 You just ruled that plaintiffs can bring
16 Dr. Haber to talk about causation. Dr. Madigan
17 does not have any reason to be coming as a
18 statistician and talking about causation. He's
19 not a medical doctor.

20 He also bases his opinion on two studies
21 that have problems. His opinion is based on
22 two asbestos exposure studies. Number 1,
23 Stephan (ph), which Your Honor's familiar with.
24 This is Dr. Longo's below-the-waist study.

25 Dr. Longo testified -- and I think Your

1 Honor might be surprised by this -- but
2 Dr. Longo testified he is not relying on his
3 below-the-waist study in this case. When asked
4 why, he said, "Because that relates to Italian
5 talc and that is not at issue in this case."

6 So, Dr. Longo is not relying on his own
7 study because of relevance. Dr. Madigan should
8 not either.

9 The second study that Dr. Madigan relies
10 on is the Gordon study. And low and behold
11 that is also Italian talc, which has its own
12 problems, based on the testing methodology that
13 I'm sure Your Honor has seen several times
14 before.

15 Both of these, Stephan and Gordon, which
16 Madigan relies for his general causation
17 opinion, are admittedly outlier studies. He
18 does not consider other studies with different
19 results. So, Your Honor, we've briefed this.
20 I know you've got a thick binder in front of
21 you and it's 5:00. I ask Your Honor to exclude
22 the general causation opinion of Dr. Madigan.
23 This is simply outside of his expertise.

24 THE COURT: All right.

25 MR. ADAMS: Quickly, Your Honor, it's not

1 outside Dr. Madigan's expertise to give the
2 general causation opinion, because he has
3 specialized knowledge and expertise in
4 epidemiology, which is closely linked to
5 statistics. He's published over 30 papers on
6 epidemiology. He's taught courses at the
7 college level on epidemiology, including at
8 Columbia, where he was the chief of the
9 Department of Statistics.

10 What his general causation opinion is, is
11 here are the published peer-reviewed studies on
12 the levels of asbestos released into the air
13 from the use of cosmetic talc, including the
14 talc used in Johnson's Baby Powder for over 70
15 years. Here's the air levels. And he compares
16 them to the level of asbestos in the air in
17 epidemiology literature -- over a dozen studies
18 -- that increases the risk of disease, and it
19 shows that the levels in the air are above the
20 levels in the epidemiological studies that
21 prove asbestos cause disease. That's the
22 general causation opinion. He's absolutely
23 qualified to give it.

24 It's false that Italian talc is not at
25 issue in this case, even though that is what

1 was measured in Gordon and Stephan, because
2 Johnson & Johnson used exclusively Italian talc
3 for seven months, between 1979 and 1980, when
4 there was a strike going on and they couldn't
5 use Vermont talc.

6 Mr. Perry was using Johnson's Baby Powder
7 every single day, multiple times a day, during
8 that entire seven-month period. And so Italian
9 talc is at issue in this case. Mr. Perry was
10 exposed to it and it did contribute to his
11 disease.

12 Unless you need to hear anything else --

13 THE COURT: All right. That's it.
14 Anything in reply?

15 MS. BUENO: Dr. Madigan is offering
16 testimony about epidemiology. He's done that
17 in the past. Your Honor's probably seen it,
18 where he talks about the power of different
19 studies. All of that's fair. That's fine for
20 him to talk about epidemiology.

21 Where I ask Your Honor to draw the line is
22 when he comes to an opinion -- like a medical
23 doctor would -- that there's sufficient
24 evidence that asbestos exposure is found in
25 regular use of talc caused or developed

1 mesothelioma. That's a step too far. He's a
2 statistician.

3 He can talk about what the epidemiology
4 says. He can talk about the powers of those
5 studies and everything else, as he's done in
6 the past, but this new opinion where he's
7 taking a leap, where he's now saying, "I can
8 opine on general causation," that's too far for
9 a statistician.

10 THE COURT: You know, I just don't see
11 this as some great big problem. I mean, the
12 majority of people that have looked at this
13 issue at any time in the recent past have come
14 to the conclusion that exposure to talc with
15 asbestos causes mesothelioma, or can cause
16 mesothelioma. And the question is levels of
17 exposure and how that increases the probability
18 or possibility that someone develops
19 mesothelioma. I don't see this as some great
20 big deal. That's kind of common knowledge now.

21 MS. BUENO: Well, I hear what Your Honor
22 is saying, but Dr. Madigan is a perfect
23 example, because what he relies on in his
24 charts and his report, do you know what they
25 are? They're asbestos studies. So I think it

1 is common knowledge. And I think nobody would
2 disagree that if you're exposed to asbestos --

3 THE COURT: Well, that's what he's being
4 asked to talk about.

5 MS. BUENO: It's different when you start
6 talking about cosmetic talc, because there's a
7 genuine disagreement. There is a genuine
8 disagreement --

9 THE COURT: Well, yes, ma'am, but there is
10 a vast amount of agreement -- there's a vast
11 amount of material, in which anyone can rely,
12 that says that talc does have asbestos in it.

13 You and J&J continue to insist that talc
14 does not have asbestos in it. It all has to do
15 with the way you define asbestos. And I get
16 all of that, but I am not going to exclude
17 Madigan's testimony.

18 MS. BUENO: Your Honor, we have
19 Dr. Longo's motion, and then a motion on tissue
20 testing and that would be it.

21 THE COURT: All right. Longo.

22 MR. COWAN: I will be very brief. The
23 papers -- may I approach?

24 THE COURT: Yeah.

25 MR. COWAN: The paper that we filed has

1 many exhibits. I'm trying to make this as
2 simple as possible. This is about specific
3 opinions that Dr. Longo has concerning his PLM
4 heavy liquid separation testing for chrysotile,
5 not for amphibole, not as TEM. It is specific
6 to his chrysotile findings and the methodology
7 that he is using, but not only that, but the
8 way he is applying the methodology.

9 THE COURT: What is different about this
10 argument from the argument I received in Plant
11 about this very same witness?

12 MR. COWAN: I have not seen your ruling on
13 Plant. I apologize if I did not see that.

14 THE COURT: Well, I moved that they --
15 every time Longo testifies, the defense always
16 says, he can't offer opinion about chrysotile.
17 We have a different opinion about chrysotile
18 that's different from crocidolite, et cetera,
19 et cetera. It's a basic split between defense
20 and plaintiff as to chrysotile.

21 Longo has his opinions. He's
22 cross-examined at length about them. I have
23 ruled in every case he's been on that he can
24 testify.

25 MR. COWAN: I'm going to sit down, Your

1 Honor. I did not know that you had ruled in
2 Plant. And Plant's counsel did not inform me
3 about it.

4 THE COURT: I've been down this road many
5 times in the past. I'm going to deny the
6 motion.

7 Now, what's the last one?

8 MS. BUENO: The last motion, Your Honor,
9 is a motion to exclude tissue testing in this
10 case.

11 There has not been any tissue testing
12 done, so you might be wondering why I'm sitting
13 here asking you to exclude it. Here's why:
14 You filed and you signed a motion, you may
15 recall, on July the 10th, ordering the division
16 of tissue in this case.

17 THE COURT: I don't know why this ends up
18 being one of the most contentious things I deal
19 with in these asbestos cases, and some of the
20 outrageous things that have been done about
21 this just defies the imagination.

22 MS. BUENO: Well, Your Honor, let me give
23 you a chance to set the scene here, because I
24 don't know what has happened in the past. I
25 just know what we've done in here.

1 We asked, on June the 20th, for
2 plaintiffs' assistance to get the tissue
3 divided. And it took us a while to get an
4 order to you. After diligence of defense
5 counsel, we have all sorts of correspondence
6 attached to the motion --

7 THE COURT: Right.

8 MS. BUENO: -- but we finally got an order
9 to Your Honor.

10 THE COURT: Yes, ma'am.

11 MS. BUENO: One of the reasons for delay
12 was because our expert, Dr. Roggli, who was
13 going to analyze the tissue for us, because of
14 the delay of getting an order and getting the
15 division, realized he wasn't going to be able
16 to get it done before trial. So we had to
17 find, in a very quick second, another expert to
18 analyze it.

19 Your Honor entered the order on July
20 the 10th, which is 20 days ago. Dr. Longo was
21 deposed on the 16th of July, I believe. 16th.
22 And he testified that he would be analyzing it
23 for plaintiffs, but it would take him two- to
24 three weeks to get any type of results because
25 it's a process, as our folks said, too.

1 The tissue was not divided by July
2 the 24th, which is when we filed this motion.
3 And our motion, basically, says we're out of
4 time. We don't have time to get this tissue
5 divided. That was July the 24th.

6 Now it's almost a week later and I was
7 informed today by plaintiffs' counsel that the
8 tissue has been divided and has been sent to
9 the respective experts. I have been unable to
10 even confirm that our expert even has it
11 in-hand. But we are asking Your Honor to just
12 exclude the tissue testing because we are;
13 we're out of time. We're less than a week from
14 trial. And it was our idea, I must say, to get
15 it done in the beginning. Plaintiffs did not
16 do any tissue testing. We asked for it. And
17 as soon we asked, they said, "Well, we want to
18 do it, too," but it hasn't been done.

19 Dr. Longo says it's going to take him two
20 or three weeks. It's not going to happen
21 before trial. And we can't get into a
22 situation where there's a surprise the morning
23 of opening statements about what this tissue
24 allegedly says or doesn't say. We would need
25 time for reports. We would need time for

1 depositions. We would need time for other
2 experts to analyze it. We're simply out of
3 time. So that was the basis for our motion.
4 And I understand plaintiffs oppose it.

5 THE COURT: Ms. McVey.

6 MS. McVEY: Your Honor, this is a much
7 different situation. You know, in Glenn, we
8 had a much different issue. We had an issue
9 where the tissue wasn't divided by an impartial
10 third-party --

11 THE COURT: Yes.

12 MS. McVEY: -- and it became a whole
13 thing. Here, we wanted to alleviate that. And
14 so Johnson & Johnson's counsel and plaintiffs'
15 counsel, we went back and forth trying to come
16 up with an order that we could send to MUSC, to
17 an independent third-party, to have tissue
18 divided. And it's the same order that we used
19 in the Mauze (ph) case, that you had signed.
20 That was the order that we sent to Johnson &
21 Johnson, initially. It's an order that you
22 already signed, having MUSC divide it.

23 Johnson & Johnson didn't like that order
24 exactly. They wanted to change it. So we went
25 back and forth to do that.

1 The morning that we all agreed on the
2 order that we would submit to you, Ms. Bueno
3 wrote and said, do not submit the order to you
4 now because Dr. Roggli doesn't have time to do
5 the testing. And I said to her then, that's
6 not my issue. Right? That's y'all's issue.

7 And so I wrote to you and I said, Look,
8 they said they don't have to. They don't have
9 an expert to do it. That's not really our
10 problem. We have an expert that can do it.

11 And then Ms. Bueno said we have an expert
12 now that can do it, too. Okay. This will work
13 for the judge, which is what we did, the
14 consent order. You signed it on the 10th.

15 On the 10th, that very day --

16 THE COURT: I signed it as soon as I got
17 it. If the implication is somehow or another
18 that it sat on my desk for awhile is not the
19 case.

20 MS. BUENO: No, that was not the
21 implication, Your Honor.

22 THE COURT: All right.

23 MS. McVEY: Well, the implication seems to
24 be that somehow we held this up. That's not
25 exactly at all what happened. What we did

1 immediately when we got your order, we sent
2 it -- we'd already been in touch with general
3 counsel and the pathologist's office and we
4 sent to them both saying, "The judge has signed
5 an order. Please split the tissue. And, by
6 the way, we have a trial coming up on
7 August 5th. We know time is of the essence."

8 After that order, we went -- we probably
9 -- and I can give you all the correspondence.
10 But between Mr. Adams, Ms. Gross and me, we
11 e-mailed or called them almost everyday to say,
12 "Where is it?"

13 Finally on Monday -- no. On Friday and
14 Saturday, we reached out and said, "We've got
15 to have it." Monday, I wrote general counsel
16 of MUSC and said, "You're in violation of a
17 court order, and we now have a hearing with
18 Chief Justice Toal tomorrow." This was
19 yesterday.

20 The fact that we're having it here today,
21 MUSC overnighted the tissue. They divided it
22 and they split it. And they sent to where
23 Johnson & Johnson told us to send it and we
24 sent it to our expert. FedEx shows that it was
25 delivered to both experts before 8:30 this

1 morning.

2 Dr. Longo's reviewed this digestion and
3 we'll make him available for a deposition. We
4 believe that we should be able to do the
5 digestion. Our expert can do it.

6 I'm sorry if their expert doesn't have the
7 time to do that, but this is not as a result of
8 our delay. It's MUSC's, if anybody's, and that
9 would penalize the plaintiffs. Because what
10 they're going to do -- and you've seen them do
11 it before. They did it in Plant. Why didn't
12 plaintiffs pass the tissue? And it becomes a
13 humongous thing.

14 THE COURT: I know. I'm very familiar
15 with it.

16 MS. McVEY: And so, Your Honor, we believe
17 that we should be able to test the tissue. Our
18 expert can do it. I bet their expert can do
19 it, too.

20 THE COURT: That would be my bet.

21 MS. McVEY: But we believe we should go
22 forward. We did everything we could to get
23 this to you and to MUSC as soon as we could.

24 THE COURT: All right.

25 MS. BUENO: Last word, Your Honor.

1 There's no -- I'm not trying to point the
2 finger at anybody here for causing delay. It's
3 just where we are. We are less than a week
4 before trial. And to have a situation now
5 where we don't know -- we haven't talked to our
6 expert to see if this work can be done.

7 Dr. Longo, himself, testified under oath
8 that he needed two or three weeks and wouldn't
9 be able to do it any shorter. Now I hear
10 counsel saying otherwise. I'm not sure that
11 this can get done. And it --

12 THE COURT: Well, if it can't get done,
13 we'll revisit it, but I'm denying this motion.

14 MS. BUENO: And then we need probably an
15 opportunity to have reports, to get the
16 reports --

17 THE COURT: Ms. Bueno, I have seen
18 miracles accomplished when a trial date is in
19 prospect. And my guess is that something will
20 be done here. But I'm not going to rule on
21 things in the abstract. I did what I needed to
22 do to get this order out. Apparently, the
23 snafu was all along the line. I can't be
24 responsible for those, but now both sides have
25 the tissue samples and I'm not going to rule at

1 this time, even though they now have it, that
2 no tissue -- information can be put in at
3 trial. I deny the motion.

4 Okay. What else?

5 MS. McVEY: I think that's it for motions.
6 What I'd like to do is send an e-mail with just
7 some housekeeping things, and I'll do that
8 tomorrow morning.

9 We need to address the Clubman issue and
10 what the jury will be told about that, and some
11 other evidentiary issues. I think we can do it
12 via e-mail to the Court.

13 Our expectation, what we've told
14 everybody, is that this case will take two
15 weeks to try.

16 THE COURT: And as you know, I don't like
17 that.

18 MS. McVEY: I know, but you remember
19 what -- you can't get the trial done in a week.
20 Remember even with Plant, we had to kill
21 ourselves to get it done in eight trial days, I
22 guess.

23 THE COURT: Well, I don't function, and
24 y'all don't function well in this and we just
25 say, okay, it's going to be two weeks, and then

1 we yank it down at the very end. I want some
2 limitations on number of witnesses, number of
3 experts, amount of time each side has, how long
4 the experts' testimony is going to take, all of
5 that, like I always do.

6 MS. McVEY: Absolutely.

7 THE COURT: So here's what I want to have
8 happen:

9 I want y'all to immediately propose --
10 make specific proposals on how this case should
11 be tried; what witnesses are going to be used;
12 what the time frame is going to be for them,
13 and the like.

14 MS. McVEY: Yes, ma'am.

15 THE COURT: And submit those to me by --
16 what, today is Tuesday?

17 MS. McVEY: Yes, ma'am.

18 THE COURT: I need them by Thursday or
19 early Friday, because I have to be able to make
20 some rulings on them so y'all will know what's
21 going to happen.

22 MS. McVEY: Yes, ma'am.

23 THE COURT: So I would really like for you
24 to get together on this, if it's at all
25 possible. And I can tell you, I do not want to

1 jam it up for two weeks. I want everything to
2 be tried and ready to go to the jury within the
3 mid-point of the second week, so that we'll
4 have a day for the jury to be instructed, and
5 deliberate, and another day if they should need
6 it. I don't want this thing jammed down to
7 something that's going to be on a Friday and
8 the jury doesn't get the case until 3:00 in the
9 afternoon. I'm not going to do it that way.

10 MS. McVEY: And what we'll propose to do
11 and what we have done in the past, I send an
12 e-mail saying, here's the proposed time limits
13 for each witness: Direct, cross, redirect.
14 We'll keep it moving. I think the jury should
15 be told that it's going to go into a second
16 week.

17 THE COURT: I want to be able to tell the
18 jury that, but I also want to be able to tell
19 them that they have limitations in place that
20 will have it going to them so they don't have
21 to stay here on a Friday late.

22 MS. McVEY: A hundred percent. And we
23 don't have any duplicative witnesses. In other
24 words --

25 THE COURT: And I don't know, it may end

1 with the first verdict. Period. It may have
2 to go forward if there's some kind of need for
3 the second stage of bifurcation. It might end
4 with a defense verdict right up, as many of my
5 J&J cases have done. And that may happen. But
6 I want to allow the time for the longest case
7 scenario.

8 MS. McVEY: Absolutely.

9 THE COURT: And that doesn't happen unless
10 I get the case tried by early Wednesday, at the
11 latest. And I'll be trying to push it earlier
12 than that, if I possibly can.

13 MS. McVEY: I have been in many trials
14 with you. I know how hard you push. I'm
15 respectful of it and I appreciate you don't
16 want to waste the jury's time.

17 THE COURT: I have respect for the jury.
18 I don't keep them here till late at night.
19 Most days, I start promptly at 9:30. I have
20 them in their seats before that. You know, the
21 first day is always a waste, in some respects,
22 because the jury selection, as hard as I move,
23 still takes until the afternoon. And then
24 you've got opening statements, and you might be
25 able to get up one witness, if any. So I want

1 this thing to move along.

2 MS. McVEY: We are on the same page.

3 THE COURT: Now, also, I will want some
4 advance information about voir dire questions.
5 I'd like you to get those to me as soon as you
6 can. You probably already got those halfway
7 prepared anyway. I want you to get those to
8 me. If they come in tomorrow, that would be
9 good, so that I can look at these voir dire
10 questions, decide what I'm going to ask and so
11 forth. But please note, we don't have
12 lawyer-conducted voir dire. And I am rather
13 sparse in what I do about voir dire,
14 particularly as it gets into juror's special
15 opinions about matters. I just don't think
16 that's -- that's something I want to go to.

17 And that's why I -- Mitch knows how voir
18 dire works and he'll be able to guide you all.
19 You are as the second line a component on this
20 and will be able to guide your troops on that.
21 But I want all that to me --

22 MS. McVEY: Yes, ma'am.

23 THE COURT: -- so I'll be ready. If
24 you're going to have slide decks for those
25 opening arguments, I'm going to want those in

1 advance so that I can rule on them without
2 having false starts so if we get mad at each
3 other about what goes in and what goes out. I
4 want it to move smooth.

5 MS. McVEY: Excellent, Your Honor.

6 MS. BUENO: So what I heard you saying,
7 just for scheduling purposes, is that we're
8 going to be closing this case on Wednesday.

9 THE COURT: Trying to as hard as we can.

10 MS. BUENO: The 14th.

11 THE COURT: Yes, ma'am.

12 MS. BUENO: So when we were talking, I
13 just want to make sure I have that in mind when
14 we're scheduling our witnesses. So it sounds
15 to me that our witnesses will be early that
16 week, or Friday, even, of the first week.

17 THE COURT: That's correct. That's
18 correct.

19 MS. BUENO: Okay. And then, obviously, to
20 the extent there is witness scheduling issues,
21 we'll discuss that with plaintiffs and bring
22 any issues to your attention. There may be
23 somebody we have an issue with, but we can all
24 talk through that.

25 MS. McVEY: Absolutely.

1 MS. BUENO: I heard you say opening slides
2 that we would exchange in advance.

3 THE COURT: Yes. Exchange them in
4 advance.

5 MS. BUENO: And get them to you. And when
6 do you want those, knowing that we won't maybe
7 see them again until Monday? How do we submit
8 them and when?

9 THE COURT: Put them on my front doorstep.

10 MS. McVEY: I think, Judge, it may be
11 easier that we exchange them Sunday night.

12 THE COURT: Y'all can exchange them Sunday
13 night, see if you can come to some
14 understanding. Then I don't need it.

15 MS. McVEY: And then if we need something,
16 maybe Judge --

17 THE COURT: I can always come in early
18 enough to deal with the slide decks and things
19 of that nature before jury selection begins.

20 MS. McVEY: Perfect.

21 THE COURT: If not, while jury selection
22 is on, I can decide if there's some context
23 that I need to resolve. Hopefully, that won't
24 be the case.

25 MS. BUENO: And then on a regular basis,

1 we already talked about, you know, providing
2 information the night before for a witness,
3 demonstrative exhibits. We can bring them to
4 your attention.

5 THE COURT: Exactly.

6 MS. BUENO: Do you give us time in the
7 morning of a trial date to bring those issues
8 to your attention?

9 THE COURT: If I've got something that's
10 got to be decided, is bring you in at 8:30 or
11 something like that. Depending on how big or
12 lengthy the issue is.

13 MS. BUENO: Did you say how long you will
14 go in the day?

15 THE COURT: I try to let them out of here
16 by 5:30. And sometimes I can let them out a
17 little sooner. They've got home obligations
18 and I'm sensitive to that. And depending on
19 whether we have jurors that got childcare
20 obligations, I may let them go earlier. I just
21 have to see what kind of jury we've got.

22 MS. BUENO: And an hour for lunch?

23 THE COURT: Yeah, an hour to an hour 15
24 for lunch, and I take a break mid-morning and a
25 break mid-afternoon. And seeing how well it

1 goes, try to let them go between five and 5:30,
2 as I can.

3 MS. BUENO: Terrific. And we will submit
4 voir dire questions to you tomorrow. And then
5 do we need to submit any kind of joint
6 statement of the case or is that something --

7 MS. McVEY: I'll tell you what, can I
8 e-mail you and I'll give you a proposal of what
9 we've done in the past? And then we can give
10 it to you.

11 THE COURT: Yep. Yeah, yeah.

12 MS. BUENO: Do you have a length of time
13 for opening statements that you allow?

14 THE COURT: Generally, they are about 45
15 minutes. Forty to 45 minutes. Sometimes I
16 limit testimony to 30. I know TB (sic) always
17 wants one hour apiece. But I would like to
18 start with the concept it would be 45 minutes.

19 MS. McVEY: What we've typically done,
20 plaintiffs get an hour and defendants split an
21 hour. But we can visit that. You're going to
22 be so proud of how fast we move this case. I
23 don't want you to make any decisions right now.
24 Everybody's tired.

25 MS. BUENO: Do I assume correctly that you

1 do not allow exhibits to be used in opening, if
2 they haven't yet been offered into evidence?

3 THE COURT: I try to get you to pre-admit
4 everything and I look at this -- snafus, I
5 wouldn't want to see them. You don't have to
6 do in front of a jury.

7 MS. McVEY: So if it's pre-admitted, then
8 it would be used in open --

9 THE COURT: That's correct. Anything
10 that's got any question about it, then the
11 lawyers, generally, let me know. And if
12 there's some real question about it, depending
13 on what the witness says, I tell them, "Don't
14 refer to that in opening statement." But,
15 generally, we've got all that hashed out so you
16 know exactly what you can refer to.

17 MS. BUENO: Thank you.

18 THE COURT: I try to do it that way.

19 MS. BUENO: Okay. And then we'll talk
20 about other issues.

21 THE COURT: Right.

22 THE COURT: All right. Let's talk about
23 instructions to the jury to begin with. I try
24 to get all those resolved well before the close
25 of the trial. I then have them printed and I

1 give the jurors all copies of the charges. I
2 read them to the jury without them having it,
3 and then I give them each a copy of the charges
4 to take with them in the jury room as they
5 deliberate. I also allow jurors to take notes.
6 I don't require them to. And I give them an
7 instruction about, you know, that it's for
8 their benefit and can't be used in substitution
9 for their memory of events, et cetera, et
10 cetera. So I have a kind of standard thing I
11 tell them about note-taking.

12 When each expert comes, I remind them that
13 the experts are there because they're qualified
14 and we have a quick voir dire of
15 qualifications, and I qualify them in the areas
16 that they're being offered for. I tell the
17 jury that. And I also -- I always tell the
18 jury that you are the sole judges of the
19 credibility of the witnesses and you may
20 take -- you may make that judgment and take all
21 of what they say or none of what they say or
22 some of what they say. That is how I handle
23 the experts.

24 MS. McVEY: Your Honor, for jury charges,
25 what I plan to do is take the Sarah Plant

1 charge.

2 THE COURT: Yes, I've got -- Theile has
3 got a world of different charges that I've
4 made. I'm sure Mitch has got a bunch of them,
5 as well.

6 MS. McVEY: I'll just redline what I
7 changed.

8 THE COURT: Exactly. But y'all, I think
9 y'all can work off of that and come to
10 something. If there's a dispute that needs to
11 be resolved, I can resolve them. But I want to
12 do that in time to have them printed and ready
13 and go to the jury so everything will be ready
14 to give to the jury.

15 MS. McVEY: We'll take care of that.

16 THE COURT: That's fine.

17 MS. McVEY: And the verdict forms, as
18 well.

19 THE COURT: Yeah. Verdict forms are
20 another thing. Sometimes the parties do wait
21 until the trial has moved along a little bit.
22 But I like the verdict forms as soon as you can
23 get them to me, so we can know what we're
24 doing, what we're looking at as the trial
25 proceeds, adjust according to what happens in

1 the trial.

2 MS. McVEY: Thank you, Your Honor.

3 THE COURT: Okay. Anything else I need to
4 advise about? Any questions anybody has?

5 Now, Ms. Flynn.

6 MS. FLYNN: Yes, ma'am.

7 THE COURT: What in the world is this
8 about opinion?

9 MS. FLYNN: What I was going to say, I
10 think there was a disconnect maybe a little bit
11 earlier when we were having this discussion.

12 THE COURT: Yes.

13 MS. FLYNN: And what I was saying, we
14 filed a motion to stay. We filed a motion to
15 stay with this Court, with you, because we know
16 that you have jurisdiction. We filed a
17 petition for a writ of cert with the Supreme
18 Court, but they have not accepted it yet. But
19 that's just pending. So we know that the
20 jurisdiction is with you, this Court. That's
21 what we filed is a motion to stay with you. So
22 that's what's pending on the record. I wanted
23 to make sure that that was clear.

24 THE COURT: Okay. I was slightly
25 misinformed, although, again, I don't

1 understand a cert, when I haven't ruled on a --
2 or I have a default hearing. But be that as it
3 may, I was trying to sort through all of that.
4 But you will be here?

5 MS. FLYNN: Yes, Your Honor. We will
6 definitely be here. We also filed joinders --

7 THE COURT: Yes. Please let the record
8 reflect that you have joined in all of the
9 motions that any of the defense had, and the
10 rulings you have accepted to just as your
11 counterparts at the defense table has. So your
12 situation will be totally covered, Ms. Flynn.
13 If I need to craft a special order to that, I
14 will. We'll make sure you're protected about
15 all that.

16 MS. FLYNN: In terms of a motion to stay,
17 I assume that that is denied, right?

18 THE COURT: Yes, ma'am. I'll get Eva to
19 search it out. I haven't seen it, but --

20 MS. FLYNN: I do have copies with me.

21 THE COURT: That would be helpful.

22 MS. McVEY: And, Your Honor, I just -- for
23 the record, I'm objecting to the joint Clubman
24 or AAI joining any motions.

25 THE COURT: Oh, okay. I understand. All

1 right.

2 As for the defaulting party, they cannot
3 legitimately fuss with anything that's going to
4 be admitted in the liability portion of the
5 trial.

6 MS. McVEY: Right.

7 THE COURT: The damage portions, only.
8 But I'm not going to bifurcate in such a way
9 that they would have some special standing on
10 damages. I'm going to have to figure out how
11 that stands.

12 MS. McVEY: And I'm going to e-mail around
13 it, what I've been calling a charge. It's not
14 really a charge, but what the jury will be told
15 about Clubman to differentiate what's been
16 decided for Clubman versus what has not been
17 decided for Johnson & Johnson and others.

18 THE COURT: Yep. Yep. So we'll have to
19 figure that out.

20 MS. BUENO: Yes. And we'll comment on
21 that. I mean, I think it's important for the
22 jury to understand that it was a default as to
23 a finding of liability. And we'll talk about
24 that.

25 THE COURT: Well, you're going to get to

1 argue eventually. That's something I've got to
2 work out.

3 MS. BUENO: Oh, no. And I hope you don't
4 misunderstand. I'm not suggesting that we
5 would argue against them. I just think that
6 one of the questions that the jury's going to
7 have to decide is whether or not cosmetic talc
8 had anything to do with Mr. Perry's --

9 THE COURT: Right. And they don't get to
10 argue against that. For the purposes of them,
11 it is assumed that the terms of the complaint
12 are true and sound and they are bound by them,
13 because they defaulted.

14 MS. BUENO: Exactly. And something like
15 that is exactly what we were --

16 MS. McVEY: Listen to what she's saying.
17 This is interesting. What she wants you to
18 charge them, if it's a technical issue, is the
19 allegations that's been decided against them.
20 Now that it's been determined if their product
21 is unreasonably dangerous and ineffective.

22 THE COURT: And it has been determined
23 that. You deferred it. They defaulted.
24 Therefore, they're bound. But I'm going to
25 make it clear they don't get to hide behind all

1 of the evidence, a defective product, because
2 it's all of their fault. That influences
3 whether it's J&J fault.

4 MS. BUENO: Absolutely not.

5 THE COURT: So we'll figure out someday to
6 sort that out.

7 MS. BUENO: Okay. Thank you, Your Honor.

8 THE COURT: All right.

9 Okay. Court is it adjourned.

10 (Court is adjourned at 5:39 p.m.)

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1 CERTIFICATE

2 STATE OF NORTH CAROLINA)

3 COUNTY OF GUILFORD)

4

5 I, Corinne J. Blair, Certified Real-Time
6 Reporter, Certified Court Reporter, Registered
7 Professional Reporter, and Certified LiveNote
8 Reporter, certify that the foregoing transcript of the
9 proceedings taken at the July 29th, 2024 session of
10 Richmond County Superior Court is a true and accurate
11 transcript of said proceedings recorded by me, is
12 contained in one volume, and was transcribed by me.

13 I further certify that I am not a relative,
14 employee, attorney or counsel of any of the parties;
15 nor financially interested in the outcome of this
16 action.

17

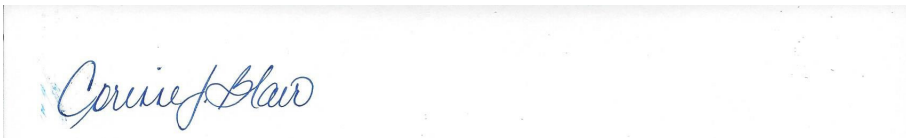
18 This 31st day of July, 2024.

19

20

21

22



Corinne J. Blair, CRR, CCR, RPR, CLR
Certified Real-Time Reporter
Certified Court Reporter
Registered Professional Reporter
Certified LiveNote Reporter

23
24
25

Exhibit 25

EXHIBIT E16

FILED
Superior Court of California
County of Los Angeles

JUL 23 2018

Sherri R. Cal... J...cer/Clerk
By Alfredo Morales deputy
ALFREDO MORALES

**SUPERIOR COURT OF CALIFORNIA
COUNTY OF LOS ANGELES**

Coordinated Proceeding
Special Title (Rule 3.550)

Case No.: JCCP 4674

LAOSD ASBESTOS CASES

CAROLYN WEIRICK, et al.,

Included Action Case No.: BC656425

Plaintiffs,

**RULINGS ON MOTIONS
IN LIMINE**

vs.

BRENNTAG NORTH AMERICA, INC.,
et al.,

Defendants.

This case is an included action within the LAOSD Asbestos Cases, Judicial
Council Coordination Proceeding (JCCP) No. 4674.

1 This Court's rulings on certain motions in limine are set forth on the attached
2 pages. Exhibit A are the rulings on the Plaintiff's Motions in Limine. Exhibit B are
3 the rulings on the defense motions in limine.

4
5 The rulings are presented in three columns. Only the third column
6 constitutes the Court's ruling. The first two columns are summaries prepared by
7 the Court's research attorney. These are left in for the convenience of the parties
8 and the trial judge, who might otherwise need to review all the pleadings to get an
9 understanding of the contentions. Where appropriate, this Court has reviewed the
10 original of the motion papers, including the evidence and testimony submitted.

11
12 The parties may not bring additional motions in limine during trial except
13 with leave of the trial judge assigned.

14
15 With respect to any motions in limine that rely upon Evidence Code § 352,
16 the Court has weighed the probative value (if any) of the evidence against the
17 prejudicial effect of its admission, as well as the potential for such evidence to be
18 cumulative, confuse the jury, or cause undue consumption of time.

19
20 The concept of admissibility evolves with trial. As the trial evolves, it may be
21 that evidence originally thought inadmissible becomes admissible in light of the
22 admission of other evidence not anticipated at the beginning of trial. Also, by
23 placing new facts in issue, a party can make previously inadmissible evidence
24 admissible to prevent unfairness to the other side. A motion in limine should be a
25 shield against the incitement of passion and prejudice, not a sword that is used to

1 lead the jury to inferences of factual conclusions that are not true or otherwise
2 improper.

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4 Unless an in limine ruling is revised by the Court, compliance is expected,
5 and counsel should advise the Court outside the presence of the jury before allowing
6 a witness to go outside the bounds of a motion in limine. Counsel are ordered to
7 familiarize themselves with, and comply with, LASC Local Rule 3.57 (e).

8 DATED: July 23 2018
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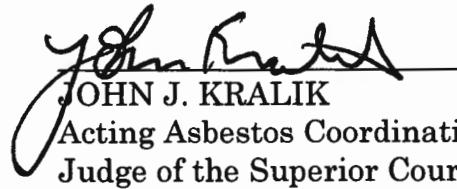
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13 JOHN J. KRALIK
14 Acting Asbestos Coordination
15 Judge of the Superior Court
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Exhibit B

Defense MILs Re: BC656425 (Weirick)

Date: 6-25-18
Time: 9:00 am

No.	What to Exclude	Arguments	Ruling
1	<p>“[E]vidence or making any reference during trial to diseases allegedly caused by or associated to asbestos-free talc, including ovarian cancer and talcosis.” (Motion, p. 1.)</p>	<p>Defendants contend:</p> <p>“Defendant Chanel, Inc. (“Chanel”), on behalf of itself and the remaining defendants, hereby moves this Court <i>in limine</i> for an order precluding Plaintiffs Carolyn Weirick and Elvira Graciela Escudero Lora (“Plaintiffs”) from introducing evidence or making any reference during trial to diseases allegedly caused by or associated to asbestos-free talc, including ovarian cancer and talcosis. This is an asbestos action. Plaintiffs allege that Plaintiff Carolyn Weirick (“Weirick”) was diagnosed with mesothelioma, a cancer in the lining of her lung, after having allegedly breathed asbestos fibers through her use and general presence around talcum powder products allegedly contaminated with asbestos. Plaintiffs’ experts concede that talc alone – absent contamination of asbestos – does not cause mesothelioma. Accordingly, any reference to diseases potentially related to the perineal use of uncontaminated talc (ovarian cancer) and mining and milling of talc (talcosis) would be wholly irrelevant, misleading, and would severely prejudice Defendants by inflaming the jury. Chanel requests an order precluding any evidence or reference to diseases not at issue, including ovarian cancer and talcosis. Similarly, Chanel requests an order precluding reference to the IARC classification for perineal talc use.” (Motion, p. 1.)</p>	<p>Granted:</p> <p>The Court finds that the motion should be granted. In light of the recent publicity and sizeable verdicts in the talc-only cases, the threat of prejudice is too great to allow Plaintiffs to present arguments and evidence regarding ovarian cancer, talcosis, and other non-asbestos injuries allegedly arising out of exposure to talc. The potential prejudice outweighs the probative value. (See, e.g., <i>Downing v. Barrett Mobile Home Transport</i> (1974) 38 Cal.App.3d 519 [injury from prior accident held irrelevant where plaintiff did not claim the subject incident caused the injury].)</p>

		<p>“Recently, lawsuits pertaining to ovarian cancer have been widely publicized and followed by national news. These lawsuits are often brought by individuals that believe that their perineal use of uncontaminated baby powder contributed to or caused such ovarian cancer. Specifically, the plaintiffs in these lawsuits believe that the talc in the baby powders contributed to their cancer. These lawsuits are unrelated to Chanel, and only relate to the use of baby powder products or other similar products intended to be used in the perineal region. By contrast, Chanel No. 5 was intended to be used as a fragrance, not for personal or feminine hygiene purposes. Critically, Plaintiffs do not allege that Weirick has been diagnosed with ovarian cancer from perineal use of talcum powders. In fact, Plaintiffs’ experts do not even claim that talc itself caused Weirick’s disease, but rather that trace levels of asbestos within the talc caused her mesothelioma. Indeed, Plaintiffs’ occupational medicine expert Dr. Jacqueline Moline concedes that talc absent asbestos contamination has never been proven to cause mesothelioma. (See Exhibit A to the Declaration of Nicole A. Harrison at 72:7-17).” (Id. at pp. 1-2.)</p> <p>“Similarly, talcosis has been studied epidemiologically as it relates to miners and millers of talc, that is, workers who have spent eight hours per day, five days per week in talc mines. In other words, there is a potential association between talcosis and prolonged exposure to talc. Here, Weirick’s alleged use and general presence around talc-containing products, including Chanel No. 5, is a mere and miniscule fraction of the work talc miners and millers perform around talc. Most importantly, Plaintiffs do not allege that Weirick has been diagnosed with talcosis. Like ovarian cancer, talcosis is a very different disease than mesothelioma, both in cause and source. Indeed, uncontaminated talc is believed to be a cause of ovarian cancer and talcosis. By contrast, Plaintiffs claim that asbestos</p>	
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		<p>within the talc in talcum powder products caused Weirick's mesothelioma, not the talc itself." (Id. at p. 2.)</p> <p>"This is not an ovarian cancer case. The disease process of ovarian cancer is markedly different than that of mesothelioma. They involve two different parts of the body, have different causes, and the epidemiology and scientific literature regarding the two diseases do not overlap. The same applies to talcosis. Accordingly, introducing evidence or even referencing ovarian cancer, talcosis, and other such diseases would be irrelevant to the claims made by Plaintiffs, and would result in a waste of the Court's time and resources. The only admissible evidence at trial is relevant evidence. Cal. Evid. Code § 350. Plaintiffs should therefore be precluded from introducing any evidence or referencing during trial any diseases not at issue in the case, including ovarian cancer and talcosis." (Id. at p. 4.)</p> <p>"[I]f Plaintiffs are allowed to reference diseases such as ovarian cancer and talcosis – two diseases that are thought to potentially be caused from exposure to talc – the jury may be misled to believe that talc causes mesothelioma, not asbestos. Moreover, lawsuits pertaining to ovarian cancer have been widely publicized and followed by the national news recently. These lawsuits are often brought by individuals that believe that their perineal use of baby powder contributed to or caused such ovarian cancer. Given the wide publicity such cases and their recent verdicts have received, as well as the personal nature of such lawsuits, it is very likely that reference to ovarian cancer will prejudice Defendants, including Chanel, by enflaming the jury. Specifically, such evidence could result in the jury believing that all products containing talc are dangerous, regardless of the evidence or expert testimony offered at trial. Accordingly, it is critical that Plaintiffs not be permitted to</p>	
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	<p>reference diseases not at issue in the case, including ovarian cancer and talcosis.” (Id. at pp. 4-5.)</p> <p>“For the same reasons stated above, any reference to or introduction of the IARC classification for perineal talc use should be precluded. Talc is not a carcinogen. The IARC monographs have differentiated the possible carcinogenicity of talc as it relates to perineal use, which is differentiated from talc not used for perineal purposes. Given that Plaintiffs’ allegations are that asbestos contamination in talcum products caused her disease and not the talc itself, any reference to the IARC classification for perineal talc use should be precluded, as it is not only irrelevant, but highly prejudicial, misleading, and serves to do nothing more than inflame and confuse the jury.” (Id. at p. 5.)</p> <p>Plaintiffs contend:</p> <p>“Defendants move to exclude reference to the association between talc and ovarian cancer. As with any other product liability claim, the relationship between talc and ovarian cancer is probative of the defendant’s knowledge of the hazards of talc; relevant to an analysis of the consumer expectations and risk/benefit tests for design defect; relevant to the analysis of allegations of a failure to warn; and material to establishing the element of malice in support of a prayer for punitive damages. In this case, such evidence is also particularly relevant to the issue of the presence of asbestos in Defendants’ talc, an issue which Defendants themselves vehemently dispute and upon which they even sought summary judgment. Defendants have actually attempted to discredit studies linking talc with ovarian cancer by pointing to the presence of asbestos in the talc as a confounding factor in those studies. Thus, the ovarian cancer discussion is relevant to the center-most issue in the case: whether the talc has asbestos in it.” (Opposition, p. 2.)</p>	
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		<p><u>“Consumer expectations” test:</u> “The fact that talc itself is a recognized carcinogen¹ for ovarian cancer is directly relevant to the “consumer expectations” test for Plaintiff’s strict liability design defect claims. A product is defective in design if it fails to perform as safely as the ordinary consumer would expect. (CACI 1203.) Evidence that talc puts its users at risk for <i>cancer</i> goes to the crux of the consumer expectations test; that Plaintiff developed another type of cancer due to the use of the product is inapposite. From the consumer or user’s perspective, cancer was never the expected result of cosmetic or baby powder use.” (Id. at pp. 2-3.)</p> <p><u>“Risk/benefit” test:</u> “CACI 1204 provides a product is defective if the benefits are outweighed by the risks, and/or the availability, cost, and feasibility of a safer alternative design rendered the harm from a product whose benefits outweigh its risks unnecessary and preventable under the circumstances. Defendants have repeatedly acknowledged that there is no actual health or medicinal benefit to the use of talcum powders. J&J has stated that the “Safety of cosmetic powders has been a concern, especially among health professionals. They have decided that powders provide no health benefit. Therefore, the potential for harm from respirables or accidental over exposure should be avoided. Mothers are now being advised not to use baby powder, especially talc baby powders.” Thus, in light of baby talc’s complete lack of “benefit,” any risk of association with ovarian cancer is unjustified. Further, Defendants admitted that the use of cornstarch instead of talc was an available and feasible alternative design, and that it is not aware of any risks associated with the substitution of cornstarch.” (Id. at p. 3.)</p> <p><u>Failure to warn:</u> “On the basis of ongoing ovarian cancer research, Defendants were aware that their product contained asbestos.</p>	
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Furthermore, J&J was aware that asbestos in talc was reaching the ovaries in research studies. [¶] This knowledge is relevant to Plaintiff's failure to warn claim insofar as J&J was aware of an early link between talc and cancer, but nevertheless failed to warn of it. J&J's conduct pertaining to early indications that talc was a cause of ovarian cancer are relevant to J&J's failure to exercise reasonable care and disregard for the health and safety of its customers and users." (Id. at pp. 3-4.)

"The hazard posed by the product --- i.e., the risk of cancer created by the application or inhalation of talc --- is the hazard about which J&J was aware and should have warned. Whether the particular cancer which arises is the same from one talc user to the next is irrelevant for purposes of judging the defendant's knowledge of the hazard and its obligation to warn or find a safer design. So, whether Mrs. Weirick developed a cancer of the lining of her lungs versus of her ovaries doesn't alter the fact that the defendants were aware that talc could cause cancer and should have warned its consumers." (Id. at p. 4.)

"Further, CACI 1203 and 1204 don't require that a Plaintiff prove a specific harm was contemplated by the defendant when it incorporated the hazardous design or failed to warn, just that it appreciated there was a risk of harm from the product or from whatever created the hazard. Indeed, CACI 1203 speaks only to the requirement that the product "didn't perform as safely" as a consumer would expect and the consumer "was harmed," and CACI 1204 requires only that plaintiff show the defendant made the product, that the plaintiff "was harmed," and that the product's design was a substantial factor in "causing harm." There is no additional requirement that the plaintiff show a particular harm, or the same harm, as any other victim of the product's defective design. A defective product may pose a danger in multiple different

		<p>ways, and evidence that it caused different kinds of harm but from the same hazardous condition doesn't render such evidence irrelevant or inadmissible. For example, a defective airbag in a vehicle might cause facial lacerations, brain injury, even death. The fact that the outcomes might differ when a defective airbag deploys simply means the airbag posed a risk of harm to the driver about which the defendant should have warned[.]” (Id. at pp. 4-5.)</p> <p><u>Presence of asbestos during exposure period:</u> “The presence or absence of asbestos in talc implicated to induce ovarian cancers is relevant not only to J&J’s knowledge of the hazards of talc, but that talc is acknowledged to contain asbestos as a regular contaminant (“possible contamination of the talc with asbestos needed to be borne in mind”). [¶] Defendants acknowledge that the risk of ovarian cancer from talc was known well back into the 1960s. Interestingly, they blame the ovarian cancer association on the presence of asbestos during that era. Thus, this evidence is probative for two reasons: 1. Defendants admit the presence of asbestos in talc during the relevant time period, and 2. Despite an awareness of a risk during that time, they failed to warn or recall the product. Presence of asbestos in the ovaries from the use of talc is well known to the talc industry.” (Id. at p. 6.)</p>	
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No.	What to Exclude	Arguments	Ruling
15	<p>“[E]vidence of, or having [Plaintiffs’] experts rely upon, three sets of test results: Dr. Seymour Lewin’s 1972 preliminary report to the FDA; Dr. Lewin’s</p>	<p>Defendants contend:</p> <p>“Defendants Johnson & Johnson and Johnson & Johnson Consumer Inc. (hereinafter, “J&J Defendants”) seek an in limine order precluding Plaintiffs from presenting evidence of or testimony related to or relying on certain documents from the 1970s that purportedly identified asbestos contamination in some cosmetic talcum powders. Such documents are hearsay and may</p>	<p>Denied:</p> <p>The notice of motion identifies three test results. The first is Dr. Lewin’s 1972 preliminary report to the FDA. Defendants claim Plaintiffs will try to introduce secondary sources –</p>

<p>1973 final report to the FDA; and a 1976 article by Drs. Arthur Rohl and Arthur Langer, titled <i>Consumer Talcums and Powders: Mineral and Chemical Characterization.</i>" (Notice of Motion, p. 1.)</p>	<p>only be invoked to the extent that an expert may reasonably rely on them. The documents at issue are misleading and consequently entirely unreliable—some have been disavowed by the authors of the cited studies, some have been deemed unreliable by the U.S. Food and Drug Administration ("FDA"), and some have nothing whatsoever to do with the J&J Defendants' products—Johnson's Baby Powder and Shower to Shower—on their face. As a result, the J&J Defendants respectfully request exclusion of all reference to these documents at trial." (Motion, p. 1.)</p> <p>"First, the J&J Defendants seek to exclude what are acknowledged as preliminary results of testing conducted by Dr. Seymour Lewin, including second-hand accounts purporting to set forth such results. These preliminary results and accounts, alleging that tremolite and chrysotile were found in several cosmetic talcum powders, including the J&J Defendants' products, differ from Dr. Lewin's final, official report to the FDA, which did not identify quantifiable levels of tremolite or chrysotile in the J&J Defendants' products. The inaccuracy of some of these accounts was recognized by Dr. Lewin himself, who wrote a letter to the editor explaining that the Wall Street Journal, for example, had misreported his findings. Preliminary test results contradicted by the final reported results, let alone second-hand accounts of such repudiated test results, are not a reliable basis for an expert's opinion." (Id. at p. 1; see also id. at pp. 3-5.)</p> <p>"Second, the J&J Defendants seek to exclude tests performed in the 1970s by Dr. Arthur Rohl, Dr. Arthur Langer, and five co-authors (the "Rohl/Langer testing"). Drs. Rohl and Langer reported "asbestiform" particles in a subset of samples taken from several brands of cosmetic talc. But the article does not indicate whether any of these results purporting to show asbestos contamination</p>	<p>e.g., a <i>Wall Street Journal</i> article and Johnson & Johnson internal documents – that detail Dr. Lewin's preliminary findings. Defendants contend the secondary sources should be excluded because (1) the <i>WSJ</i> article misreports the preliminary findings, and (2) the preliminary findings contradict Dr. Lewin's final report. (See Motion, pp. 3-5.)</p> <p>The Court believes that the Wall Street Journal article should not be admitted for the truth of matter asserted based on the present state of the record. But it may be referenced by experts for its historical significance in the debate.</p> <p>Otherwise, the Court denies the motion under LASC 3.57(a) and <i>Kelly v. New West Fed. Sav.</i> (1996) 49 Cal. App. 4th 659. First, it is unclear which, if any, secondary sources Plaintiffs intend to introduce. The Court will not issue an advisory opinion as to a category of</p>
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	<p>involve the J&J Defendants' products." (Id. at p. 1; see also id. at pp. 5-7.)</p> <p>"Further, Drs. Rohl and Langer acknowledged that the testing methods they used were incapable of distinguishing asbestos from non-asbestiform amphiboles. As the Rohl/Langer testing does not, on its face, mention any of the J&J Defendants' products and does not distinguish between asbestos and non-asbestiform amphiboles, it is not the sort of reliable test result that Plaintiffs' experts are permitted to rely on to prove that the J&J Defendants' products contained asbestos. At least one other court has agreed and excluded such evidence for this reason." (Id. at pp. 1-2; see also id. at pp. 5-7.)</p> <p>Plaintiffs contend:</p> <p>"Defendants filed motion in limine to preclude Plaintiff and her experts from relying on what they call "unreliable" test results from the 1970s concerning its talc containing products and ore sources. Defendant claims that tests performed in the 1970s with a "positive" test result, i.e. showing that cosmetic talcum powders including Johnson & Johnson Baby Powder contained asbestos, are "unreliable." But there is no factual or legal support for Johnson & Johnson's arguments and its motion simply highlights the issues the jury must decide." (Opposition, p. 2.)</p> <p>"There is nothing "unreliable" about testing done in the 1970s that shows asbestos in cosmetic talcum powders, including Johnson & Johnson Baby Powder. To the contrary, the testing confirmed what was already well-known to the talc industry—namely, that talc was contaminated with asbestos. Testing done in the 1970s confirmed the presence of asbestos in cosmetic talc, including Johnson & Johnson Baby Powder. And even if Johnson & Johnson was correct</p>	<p>potential documents. The admission of the documents may depend on when they are offered and on the examination of the witness at issue. Second, the fact that Dr. Lewin's final report contains different findings than the preliminary report does not necessarily justify exclusion and both reports are part of the history of the product. Defendants' evidence fails to establish unreliability, and they fail to identify another basis justifying exclusion. Cross-examination and targeted objections at trial are the proper ways to resolve this issue.</p> <p>The second test result is Dr. Lewin's 1973 final report. Despite identifying it in the notice of motion, Defendants do not appear to actually seek exclusion. The moving brief does not argue that the final report is unreliable and inadmissible. This portion of the motion is moot.</p>
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		<p>that the amphiboles found in these cosmetic talc samples in the 1970s were “nonasbestiform” amphiboles, that fact would not make the studies unreliable or irrelevant. The underlying presence of nonasbestiform amphiboles in talc is significant for the presence of asbestos and, thus, relevant to this case.” (Id.; see also id. at pp. 4-6.)</p> <p>“The term asbestos is generally used as “[a] name applied to a group of naturally fibrous minerals.” (A.N. Rohl, Langer et al., Consumer Talcums and Powders: Mineral and Chemical Characteristics, J. OF TOX. AND ENV. H. (1976) p. 277, attached as Exhibit A to Langhoff Declaration.) “Asbestiform” is a synonym of asbestos. Mrs. Weirick and her experts thus contend that a substantial amount of the amphiboles present in Johnson & Johnson Baby Powder were, in fact, asbestiform (i.e., fibrous) and thus capable of causing disease.” (Id. at p. 2; see also id. at pp. 6-11.)</p> <p>“NIOSH’s current recommended exposure limit (“REL”) states that particles are countable, and thus regulated as asbestos, if they include “any fiber or fragment of a mineral longer than 5 microns with a minimum aspect ratio of 3:1” NIOSH further indicates that a “covered mineral” is any mineral having the crystal structure and elemental composition of one of the asbestos varieties...or one of their nonasbestiform analogs.” The evidence in this case will be that substantial numbers of particles meeting NIOSH’s definition of regulated asbestos (i.e., fibers more than 5 microns in length with a minimum aspect ratio of 3:1) were found in cosmetic talc, including Johnson & Johnson talcum powder products and source ores, in the 1970s.” (Id. at pp. 2-3; see also id. at pp. 14-15.)</p> <p>“The issues raised in this motion go to the weight of evidence, and thus fall squarely within the realm of cross-examination, and Johnson & Johnson’s ability to present its own evidence. These are</p>	<p>The third test result is the 1976 report by Dr. Rohl and Dr. Langer. Defendants contend the result should be excluded because (1) the report fails to identify the products that contained asbestos – i.e., it fails to identify a Johnson & Johnson product, and (2) the FDA found the result unreliable. (See Motion, p. 5.)</p> <p>The Court disagrees. Dr. Langer’s 1976 report detected asbestos in cosmetic talc. In 2015, he testified that he stands behind the report and has never retracted. (See Langhoff Decl., Ex. E, pp. 62-64.) The FDA’s contrary finding does not, itself, prove unreliability as a matter of law, but it can be weighed by the jury.</p> <p>As noted elsewhere, the early work on this issue is part of the historical record of notice and the development of the science to be considered by the present-day experts or other competent witnesses.</p>
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		<p>not issues of admissibility. Because they are liable for harm caused by asbestos-containing Johnson & Johnson talcum powder products, Defendants predictably take issue with the “positive” test results showing that cosmetic talc, and particularly Johnson & Johnson Baby Powder, contained asbestos. To the extent that Defendants take issue with the testing results, it may present its own evidence, as well as cross examine Plaintiff’s experts and challenge their theories. Defendants are well-protected by their ability to present their own evidence and experts, as well as cross-examine those retained by Plaintiff.” (Id. at p. 3; see also id. at pp. 16-18.)</p> <p>“Under Kelly v. New West Federal Savings (1996) 49 Cal.App.4th 659, a motion in limine is not a mechanism for Defendants to strike unfavorable evidence. Simply because evidence is damaging to Johnson & Johnson and/or Imerys, does not mean it is inadmissible. Johnson & Johnson is confusing “unduly prejudicial” with damaging. They are not the same. (People v. Coddington (2000) 23 Cal.4th 529 [“Prejudicial” is not synonymous with “damaging”]; Vorse v. Sarasy (1997) 53 Cal.App.4th 998, 1008-09 [evidence is not prejudicial merely because it undermines the opponent’s position].) Plaintiff therefore requests that Johnson & Johnson’s motion in limine on this issue be denied in its entirety.” (Id. at p. 3; see also id. at pp. 19-20.)</p> <p>Moreover, hearsay exceptions apply to the test results. (See id. at p. 18.)</p>	<p>The Court does not opine on the ultimate issue of whether any particular document will be admitted in evidence, or for what purpose, but an in limine motion is inappropriate.</p> <p>The Court shares Defendants’ concern about prejudice since Dr. Langer’s report fails to identify a Johnson & Johnson product. However, Plaintiffs identify some relevant, non-hearsay uses – e.g., notice of asbestos hazards in cosmetic talc and failure to warn. The Court does not assess at this point whether the document can be admitted for the truth of what it asserts. Defendants should make specific objections at trial so the trial judge can rule in context. The fact that no Johnson & Johnson product is referenced can be established through cross-examination. The motion is denied.</p>
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No.	What to Exclude	Arguments	Ruling
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16	<p>“[I]ntroducing, referencing, or having its experts rely upon the article authored by Ronald E. Gordon, Sean Fitzgerald, and James Millette, entitled <i>Asbestos in Commercial Cosmetic Talcum Powder as a Cause of Mesothelioma in Women</i> (the “Article”) or its contents.” (Notice of Motion, p. 1.)</p>	<p>Defendants contend:</p> <p>“Defendants seek an order prohibiting any party, witness or attorney from making any direct or indirect reference to the article entitled <i>Asbestos in Commercial Cosmetic Talcum Powder as a Cause of Mesothelioma in Women</i> (the “Article”), or relying on same. Defendants anticipate that Plaintiffs and/or their experts will attempt to rely on the Article as evidence that Defendants’ products, including Johnson’s Baby Powder, Shower to Shower, and Chanel No. 5, were contaminated with asbestos, but it is undisputed that the article concerns products not at issue in this trial.” (Motion, p. 1.)</p> <p>“The Article was written by Plaintiff’s purported expert Dr. Gordon and coauthors Mr. Sean Fitzgerald and Dr. James Millette, who also testify as expert witnesses for plaintiffs. (See August 9, 2016 Deposition of Sean Fitzgerald (“Fitzgerald Dep.”) 175:21-23, Exhibit P to the Declaration of Jennifer T. Stewart (“Stewart Decl.”).) The Article does not test, discuss, or mention any of Defendants’ talcum powder products at issue in this case. Instead, the Article involves a product manufactured by Colgate (Cashmere Bouquet) that is not at issue in this case. As a result, the Article is, first and foremost, entirely irrelevant. It is also inadmissible hearsay.”</p> <p>“In addition, the Article is not the proper basis for expert reliance. First, the Article lacks value as expert reliance material because the testing underlying the Article is fundamentally flawed and has been excluded in a number of jurisdiction due to lack of authentication. Second, the Article is essentially a compilation of reports and testimony prepared by plaintiffs’ experts in the context of litigation. Plaintiffs are not entitled to repackage expert reports and testimony from other cases and present it in entirely different litigation. Third,</p>	<p>Granted:</p> <p>Expert testimony regarding tested samples may be excluded based on a “chain of custody” claim. (See <i>People v. Catlin</i> (2001) 26 Cal.4th 81, 134.) “In a chain of custody claim, “[t]he burden on the party offering the evidence is to show to the satisfaction of the trial court that, taking all the circumstances into account including the ease or difficulty with which the particular evidence could have been altered, it is reasonably certain that there was no alteration.</p> <p>The requirement of reasonable certainty is not met when some vital link in the chain of possession is not accounted for, because then it is as likely as not that the evidence analyzed was not the evidence originally received. Left to such speculation the court must exclude the evidence. [Citations.] Conversely, when it is the barest speculation that there was tampering, it is proper to admit the evidence</p>
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	<p>the Article is akin to a case report, which is unreliable and irrelevant to the issue of causation and, if admitted directly or as a basis of expert opinion, would greatly prejudice Defendants, confuse the issues, and mislead the jurors.</p> <p>“Finally, Defendants would be extremely prejudiced if Plaintiffs were permitted to mislead the jurors into believing that the Article relates to products at issue in this case when it does not.”</p> <p>Plaintiffs contend:</p> <p>“Defendants’ motion assert that the article is “irrelevant because it does not test, discuss, or mention any of the talcum powder products at issue in this case – Johnson’s Baby Powder.” (Mot., p. 1). What Defendants fail to note is that the talc used in the 50 containers of Cashmere Bouquet analyzed in the article is the same talc used in Johnson’s Baby Powder. 1 The Italian talc used in Cashmere Bouquet was supplied by the same supplier of Italian talc to Johnson & Johnson: defendants Cyprus Amax Minerals and Imerys Talc America. This fact alone makes the article’s findings of asbestos in Cashmere Bouquet’s Italian talc directly relevant to the asbestos content of the same Italian talc used in Johnson’s Baby Powder and supplied by defendant Imerys.” (Opposition, p. 2.)</p> <p>“Further, the article provides relevant and crucial data regarding the releasability of asbestos from cosmetic body talcum powder products that contain trace amounts of asbestos by weight. (Exhibit A at paragraph 48.) Plaintiff’s experts rely on the article and the exposure data, and confirm that the data published by Gordon, et al. is consistent with historical publications and current testing of the Italian ore.2 Plaintiff’s expert materials analyst and microscopist, Steven Compton, PhD, analyzed talc ore from defendant Imerys’ Italian talc mines (the same talc at issue in the article) and</p>	<p>and let what doubt remains go to its weight.” [Citations.]” (Id.)</p> <p>The Court has examined the article and its reliability in a previous proceeding in these consolidated cases, Alfaro v. Imerys Talc, No. B277284. The Article chronicles testing of vintage Cashmere Bouquet samples by Plaintiffs’ expert, Dr. Gordon, and two other experts often employed by plaintiff firms – Mr. Fitzgerald and Dr. Millett. As such, it is more a part of the litigation science rather than the purely disinterested science. Mr. Fitzgerald and Dr. Millett are not designated in this case and their potential biases are not subject to cross-examination. Also, Cashmere Bouquet is not at issue in this case. In the Court’s view, allowing the Article, or allowing Plaintiffs’ experts to testify about the Article’s results cause prejudice.</p> <p>The motion is granted.</p>
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		<p>concluded that “the asbestos content of samples found to contain amphibole and chrysotile fibers range from approximately 1.7 to 660 million fibers per gram. After estimating the mass of the fibers, this corresponds to a quantity ranging from 0.00002% to 0.68% by weight.” Relying on the data published by Gordon, et al., Dr. Compton opined that “Fiber release studies of consumer talc products within this range documented elevated concentrations of airborne asbestos fibers during use of those products. It is expected that aerosolization of these samples or any powder consumer product containing these samples as a constituent ingredient would likewise result in elevated concentrations of airborne asbestos fibers.” This includes Johnson & Johnson Baby Powder. (Id. at p. 4.) Accordingly, the Gordon, et al. publication is relevant to the products at issue in this case and Mrs. Weirick’s exposure to asbestos therefrom.” (Id. at p. 3.)</p> <p>“Defendants’ motion is based on the false premise that the findings in the article are unreliable because it involves testing conducted while the authors were consulting in litigation. Defendants’ essentially argue, without any evidence or legal authority, that the Plaintiffs and/or their counsel paid for the article or that its authors have some sort of interest or financial stake in the litigation and that somehow Plaintiffs and/or their counsel interfered with the peer-review process. There is no factual support for this; indeed, one of the authors, Mr. Fitzgerald, has previously testified that no law firm or attorneys representing plaintiffs paid for or otherwise influenced the authoring or publication of the article. (Excerpts from Fitzgerald Depo. dated Nov. 6, 2014, at 14:4-8, 67:10-68:22, 72:7-13, 72:18-25, 74:15-25, 82:9-14, attached as Exhibit C.)”</p> <p>“Defendant cites to no legal authority to support this position either. It therefore requests this Court to announce, as a new rule of law, that where the author of an article is an expert in related</p>	
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		<p>litigation in which the article is to be offered at trial, it should be assumed that the author has a financial stake in the litigation generally and his article cannot be referenced. Again, Defendant cites no authority for this novel position, and requests an illogical inference from the circumstances, particularly in the context of specialized asbestos-related scholarship, which often necessarily intersects with expert witnesses used in asbestos litigation. Indeed, Defendants' own experts purport to be authors of scientific scholarship and they will almost certainly attempt to refer to such work as support for their opinions.⁴</p> <p>Defendants' criticisms of the article are not a proper basis for an evidentiary challenge, but are just accusations having no factual or legal support. It is the jury's role to determine the relative value of the experts' bases for their opinions, not a matter for this Court to decide at the in limine stage."</p> <p>"It is well-established that an expert witness may testify about the reasons for his opinion and the matter upon which it is based. Specifically, Evidence Code section 802 provides: "A witness testifying in the form of an opinion may state on direct examination the reasons for his opinion and the matter . . . upon which it is based, unless he is precluded by law from using such reasons or matter as a basis for his opinion." An expert may rely on inadmissible evidence to form his or her opinion. Evidence Code section 801, subdivision (b), expressly permits an expert to rely upon inadmissible evidence (such as hearsay articles) if it is "of a type that reasonably may be relied upon by an expert in forming an opinion upon the subject to which his testimony relates" (See <i>Isaacs v. Huntington Memorial Hospital</i> (1985) 38 Cal.3d 112, 133; 1 Jefferson, Cal. Evidence Benchbook (4th ed. 2010) § 30.40, p. 680.) It follows that expert witnesses may testify about an article or</p>	
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		<p>treatise upon which they reasonably base their opinion, even if that article or treatise is otherwise inadmissible.”</p> <p>The article’s findings are consistent with testing performed in 1976 at Mt. Sinai and testing by Colgate. (See id. at pp. 6-9.)</p> <p>The article can be used for non-hearsay purposes. (See id. at p. 9.)</p> <p>The article is not prejudicial. (See id. at p. 10.)</p>	
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No.	What to Exclude	Arguments	Ruling
22	Opinions and testimony by Plaintiffs’ expert Dr. David Fractor.	<p>The binders the parties provided to the Court do not include this motion or the opposition.</p> <p>The Court conducted a conference call with the parties on June 19th, and they admitted they had not filed briefs yet. Defendants served the motion on Lexis File & serve on June 20th but did not submit a hard copy to the Court as required. Plaintiffs submitted their opposition to the Court on June 21st.</p> <p>Defendants contend:</p> <p>“Dr. Fractor admitted that he did not consider the actual deposition testimony in this case in which both Plaintiffs testified regarding the <i>actual</i> household services performed by Plaintiff Carolyn Weirick (“Weirick”), nor did he consider the fact that Plaintiffs hired individuals to assist with certain services well before Weirick’s diagnosis. Dr. Fractor admitted that he simply provides a “benchmark” of household services for the average adult, and that he expects the jury to adjust the benchmark based upon the actual evidence in this case. Allowing the jury to hear a calculation of</p>	<p>Denied:</p> <p>The motion does appear to be untimely. The Court held the final status conference on June 11th. Under the Court’s protocol, the parties were required to meet and confer at the hearing and then provide the remaining motions in limine to the Court.</p> <p>Defendants did not e-serve this motion until June 20th, and never submitted a hard copy. The Court did not grant Defendants leave to file the motion late.</p> <p>But the Court denies the motion for a separate reason. This Court has held in other</p>

	<p>household services that far exceed the actual evidence in this case will be prejudicial to Defendants.” (Motion ,pp. 1-2.)</p> <p>“David Fractor, Ph.D. (“Fractor”) was deposed on June 1, 2018. Prior to his deposition, Plaintiffs produced Fractor’s Loss Summary Reports, which calculated \$8,484 in past household services and \$438,323 in future household services. (Declaration of Lindsay Weiss (“Weiss Decl.”), Exhibit A.) In making his determination regarding household services, Fractor testified that he used the Dollar Value of a Day to come up with the annual replacement costs for services that Weirick can no longer perform. (Weiss Decl., Exhibit B at 40:15-3; 43:25-44:14.) However, Fractor conceded that his valuation did not take into consideration the deposition testimony offered by the Plaintiffs regarding the activities Weirick does and does not perform around the house. (<i>Id.</i> at 44:15-48:6.) Fractor testified that his valuation is solely a “benchmark” that the jury can use to either add or subtract to, based on their opinion of whether Weirick falls within the general Dollar Value of a Day mold his calculations were based on. (<i>Id.</i>) Fractor has no opinion one way or another as [to] whether Weirick falls above or b[e]low the national average with regard to the activities that are listed on The Dollar Value of a Day tables which he used to calculate damages in this case. (<i>Id.</i> at 48:2-6).” (<i>Id.</i> at p. 2.)</p> <p>“In <i>In re Lockheed Litig. Cases</i> (2004) 115 Cal.App.4th 558, 563, the Court of Appeals construed Evidence Code section 801(b) to require that a trial court must determine that the matter relied on by an expert “provide[s] a reasonable basis for the particular opinion offered.” The Court rejected the plaintiffs’ argument that Evidence Code section 801(b) requires the trial court only to determine whether the type of matter on which an expert relied in forming his or her opinion is the type of matter on which an expert can reasonably rely in forming an opinion, without regard to whether</p>	<p>actions in the coordinated <i>LAOSD Asbestos Cases</i> that “loss of household services” is recoverable by personal-injury asbestos plaintiffs. Defendants contend Dr. Fractor’s opinion is unusual because he created a generic value based on the Dollar Value of a Day tables instead of quantifying the actual value of the actual household services Ms. Weirick provides. In <i>McKinney v. California Portland Cement</i>, however, the Court of Appeal affirmed a similar approach. The expert there used the Cornell University study – which “analyzed what people did around the home such as home repair and maintenance, automobile maintenance, yard work, cooking, cleaning, shopping and general home maintenance” – and “assumed that decedent was an average provider based on the study criteria.” (<i>McKinney</i> (2002) 96 Cal.App.4th 1214, 1229.) The expert “presented an estimated value of an average provider’s services in the</p>
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	<p>the matter on which the expert relied reasonably supports the particular opinion offered. (<i>In re Lockheed Litig. Case, supra</i>, 115 Cal.App.4th at p. 563.) The matter relied on must provide a reasonable basis for the particular opinion offered. (<i>Sargon Enterprises, Inc. v. University of Southern California</i> (2012) 55 Cal.4th at p. 770, citing <i>In re Lockheed Litig. Cases, supra</i>, at p. 564.) It is therefore improper to use conjectural and speculative matters to support an expert's opinion on any subject because those types of matters render the opinion unreliable and irrelevant. (<i>Korsak v. Atlas Hotels, Inc.</i> (1992) 2 Cal.App.4th 1516, 1524; see also <i>Jennings v. Palomar Pomerado Health Sys., Inc.</i> (2003) 114 Cal.App.4th 1108, 1118—expert must offer “reasoned explanation illuminating why the facts have convinced the expert.”) (Id. at pp. 3-4.)</p> <p>“In addition, Evidence Code section 802 provides that “[a] witness testifying in the form of an opinion may state...the reasons for his opinion and the matter...upon which it is based, unless he is precluded by law from using such reasons or matter as a basis for his opinion....[t]he court in its discretion may require that a witness before testifying in the form of an opinion be first examined concerning the matter upon which his opinion is based.” Thus, under Evidence Code section 802, not only may the trial court inquire into the expert's reasons for an opinion, and examine experts concerning the matter on which they base their opinion before admitting their testimony, it may also inquire into whether that material actually supports the expert's reasoning. (<i>Sargon Enterprises, Inc. v. University of Southern California, supra</i>, 55 Cal.4th at p. 771.)” (Id. at p. 4.)</p> <p>“Fractor calculates loss of household services beginning in February 2017 (the date of Weirick's diagnosis) through July 2, 2041. (Weiss Decl., Exhibit A). In calculating loss of household</p>	<p>home[.]” (Id.) The Court of Appeal held that the “estimate, coupled with the evidence of [decedent's] actual work around the house, was properly presented for the jury's consideration.” (Id. [emphasis added].) Subject to specific objections to specific evidence at trial, Plaintiffs here probably should receive the same opportunity to combine estimate evidence and “actual work” evidence. If Dr. Fractor has not done so, he can be subject to cross-examination on that point.</p>
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		<p>services, Fractor uses the Dollar Value of a Day survey tables, which he concedes provides benchmark numbers for average adults performing household services. (Weiss Decl., Exhibit B at 43:25-44:14). Despite the fact that Fractor was provided Weirick's deposition testimony, in which she testified regarding the services she actually performs – and those she does not – Fractor claims that he could not rely upon the deposition testimony to provide him the accurate number of hours a person spends performing certain services. (<i>Id.</i> at 44:15-45:11). Fractor admitted that he did not try to “parse it out at all” and did not determine which services Weirick actually performed. (<i>Id.</i> at 45:21-46:11). Fractor did not take into consideration the fact that Weirick testified that she has employed a housekeeper, a gardener and a nanny for some time and prior to her diagnosis, and he did not consider the testimony where Weirick actually discussed the amount of cooking, grocery shopping, bill paying and handyman work that Weirick performed prior to her diagnosis. (<i>Id.</i> at 46:12-48:1). Fractor testified that he simply provides a benchmark and then lets “the testimony drive that number at trial.” (<i>Id.</i> at 46:24-47:1).” (<i>Id.</i> at pp. 4-5.)</p> <p>“Similarly, Fractor did not take into consideration any of the testimony that Weirick's spouse gave regarding the services Weirick's spouse actually performed for the family home. (<i>Id.</i> at 47:16-20). Fractor has no opinion as to whether or not Weirick falls above or below the national average concerning the various activities that are listed on the Dollar Value of a Day tables, which he used to prepare his calculations in this case. (<i>Id.</i> at 48:2-6).” (<i>Id.</i> at p. 5.)</p> <p>“In addition, Dr. Fractor adopts the calculations performed by Plaintiffs' expert Karen Luckett with regard to damages associated with household services, and did not verify the accuracy of the information provided by Luckett nor did he perform his own</p>	
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	<p>investigation or research as to Plaintiffs' household services. Defendants refer the Court to their Motion <i>in Limine</i> No. 23, which challenges the foundation for Lockett's opinions in this matter. Accordingly, for the reasons set forth in Motion <i>in Limine</i> No. 23, Defendants respectfully request that the Court issue an order precluding Dr. Fractor from adopting the opinions of Karen Lockett." (Id.)</p> <p>Plaintiffs contend:</p> <p>"Defendants improperly seek to preclude Plaintiffs' economist Dr. David Fractor from providing opinions regarding Plaintiff Carolyn Weirick's loss of household services. First, Defendants' motion should be denied because it is untimely. Dr. Fractor was deposed in this matter on June 1, 2018 and Defendants did not file the instant motion until 19 days later on June 19, 2018, eight days after all motions <i>in limine</i> were due to the Court." (Opposition, p. 2.)</p> <p>"Second, even if this motion is considered by the Court, it should still be denied because Dr. Fractor's opinions regarding loss of household services are admissible under Evidence Code Section 801 and <i>McKinney v. California Portland Cement Co.</i> (2002) 96 Cal.App.4th 1214." (Id.)</p> <p>"The plaintiff seeking recovery has the burden to prove the "reasonable value" of the household services he or she will no longer be able to provide in the future as a result of his injuries and death. That evidence must come from an expert economist. (Evid. Code, section 801(a).)2 Plaintiffs have therefore designated Dr. Fractor to offer opinions regarding, among other things, the value of Carolyn's future household services. Dr. Fractor used the "Dollar Value of a Day"3 to come up with a benchmark number for Carolyn's loss of household services, both past and future. It is a</p>	
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		<p>number that the jury can use, and then based upon the evidence presented at trial regarding Carolyn’s specific household duties and her inability to perform those duties, evaluate whether Carolyn’s loss is more or less than the number provided by Dr. Fractor.” (Id. at p. 3.)</p> <p>“Dr. Fractor’s valuation of future loss of household services also includes services that Carolyn would have provided to her children had she not developed mesothelioma. To prove the reasonable cost of outside services, plaintiffs asked Life Care Planner Karen Luckett to prepare a report. Based on Dr. Fractor’s review of Luckett’s report, and his conversation with her, Dr. Fractor has formed opinions regarding the economic value of that component.” (Id.)</p> <p>“Under California law, an economist may rely only on estimates derived from statistical data in forming an opinion about loss of household services. The Court in <i>McKinney v. California Portland Cement Co.</i> held that it was appropriate for Plaintiffs’ economist Dr. Ben-Zion’s rely on the Cornell Universe study that analyzed household services to calculate Plaintiffs’ loss. <i>McKinney v. California Portland Cement Co.</i> (2002) 96 Cal.App.4th 1214, 1229. The Court stated that Dr. Ben-Zion’s use of the study “presented an estimated value of an average provider’s services in the home. This estimate, coupled with the evidence of Roland McKinney’s actual work around the house, was properly presented for the jury’s consideration. (Id.) Dr. Ben-Zion explained at trial that the jury then evaluates the evidence regarding the particular individual and household duties performed by that individual, and then decides whether that individual did more or less than the average and had more than average skills in determining the value of the services. (Id.)” (Id. at pp. 3-4.)</p>	
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		<p>“Here, Dr. Fractor does exactly what California law allows him to do, relies on a study that provides statistical data regarding household services, comes up with a benchmark for the jury and allows the jury to decide whether Carolyn’s services would fall above or below his benchmark number. Defendants fail to acknowledge the law and argue that Dr. Fractor’s opinions are speculative and should not be admissible because he did not take into consideration Carolyn’s testimony about her inability to perform certain household duties. Striking Dr. Fractor’s opinions regarding future loss of household services or limiting the number is not for the judge to decide. It is for the fact finder determine after all of the evidence is presented.” (Id. at p. 4.)</p> <p>Dr. Fractor may rely on Karen Lockett’s report no matter whether it is hearsay. (See id. at pp. 4-5.)</p> <p>Dr. Fractor is qualified to testify about a Life Care Plan, and his opinions are relevant to the “household services” component of future economic damages. (See id. at pp. 5-7.)</p>	
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No.	What to Exclude	Arguments	Ruling
23	Opinions and testimony by Plaintiffs’ expert Karen Lockett.	<p>During the June 19th conference call, Plaintiffs informed the Court that they would be filing an opposition. They provided a hard copy to the Court on June 21st.</p> <p>Defendants contend:</p> <p>“The expert discovery cut-off in this action was May 14, 2018. On February 23, 2018, Plaintiffs designated Karen Lockett as an expert witness, and the parties agreed Ms. Lockett would be deposed on May 14, 2018. Just days before Ms. Lockett’s scheduled deposition, however, Plaintiffs unilaterally removed the deposition</p>	<p>Denied:</p> <p>Ms. Lockett’s deposition occurred after the discovery cutoff, but the Court declines to exclude her on this ground. Her deposition finished last week, and Defendants were able to question her. Defendants did not suffer prejudice.</p>

	<p>from the case’s calendar, providing no explanation at the time. Later, Plaintiffs would explain that Ms. Luckett suffered “toxic poisoning” that precluded her from testifying as scheduled. Once her deposition eventually convened, however, Ms. Luckett testified she had been ready and able to testify.” (Motion, p. 3.)</p> <p>“This feels like game-playing that exceeds even the usual scenario of late-deposed experts. Even so, defendants would not complain for this reason alone. But there is more here than the flouting of deadlines. Defendants eventually deposed Ms. Luckett on May 22, 2018. After that deposition, she dramatically revised her report—and plaintiffs have now offered Ms. Luckett for yet another deposition. So, a late report has been supplanted by an even later one, and a late, still-untaken deposition is meant to supplement her prior, late testimony. Ms. Luckett gets to “fix” her report and her testimony, and defendants—and their reciprocal damages expert—are left to react at the last minute.” (Id.)</p> <p>“Ms. Luckett is not qualified to opine on life care plans for patients with mesothelioma. Her experience and expertise in life care planning is with plaintiffs who have been diagnosed with orthopedic injuries – not cancers, let alone mesothelioma. Accordingly, many of Ms. Luckett’s opinions are speculative and lack foundation. As an example: Ms. Luckett included costs for future medical costs—such as alternative therapies, surgical interventions, and hospitalizations — based solely on her independent research on cancer from the American Cancer Society’s website and not in relation to Ms. Weirick’s current condition or recommendations from Ms. Weirick’s treating physicians.” (Id. at p. 4.)</p> <p>“Ms. Luckett’s opinion regarding the future value of Ms. Weirick’s medical services is inadmissible. Ms. Luckett improperly calculated</p>	<p>The Court finds Ms. Luckett qualified to testify. She is a practicing life-care planner. She has testified in 70 cases, including cases involving personal injuries and products liability, and has never been disqualified. (See Blumenfeld-James Decl., Ex. A, pp. 8-9.) Markedly, she testified that she agreed with Defendants’ standards and methodology (the International Academy of Life Care Planners Standards of Practice) and followed the steps. (See id. at Ex. A, pp. 220-224.)</p> <p>Defendants’ assertion – Ms. Luckett is unqualified because she hasn’t worked on many mesothelioma cases – is unpersuasive. “[T]here is no requirement that the expert have experience in the particular field of his or her testimony[.]” (Wegner et al., Cal. Practice Guide: Civil Trials and Evidence (The Rutter Group 2018) ¶ 8:737.) The expert can testify if he or she shows “a ‘special’</p>
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	<p>Ms. Weirick’s future medical damages based on the amounts that providers bill for medical services and equipment, rather than the lesser amounts accepted as full payment.” (Id.)</p> <p>“Ms. Luckett’s life care plan includes damages for loss of future household services, which is not a proper element of economic loss pursuant to Civil Code Section 1431.2(b)(1). Compounding this error, Ms. Luckett’s calculations are further flawed because she used an average value of all services performed by married homemakers, rather than basing her calculations on the specific, more limited services Ms. Weirick actually performed before her mesothelioma diagnosis. Similarly, Ms. Luckett’s life care plan includes costs for Ms. Weirick’s children that are simply not recoverable in a personal injury action—such as expenses for her three children to attend college and receive grief counseling and financial planning services. It is well established under California law that there is no right to recovery for loss of parental consortium in a personal injury action.” (Id.)</p> <p>Plaintiffs contend:</p> <p>“Karen Luckett was offered for deposition on May 14, 2018, the last day of expert discovery. (Blumenfeld-James Dec. ¶ 2). However, on May 8, 2018 Ms. Luckett experienced an incident with her car that caused her to inhale toxic fumes that burned her lungs making it hard for her to breath and talk. This made it impossible for Ms. Luckett to finish her work on the case, and sit for deposition on May 14, 2018.” (Opposition, p. 2.)</p> <p>Defendants did not experience prejudice: “In their motion, Defendants make the factual statement that Ms. Luckett’s deposition took place after the close of expert discovery. But what they do not state, is how this prejudiced them. The reason for this is</p>	<p>knowledge of the subject matter.” (Id.) In accordance with the International Academy of Life Care Planners Standards of Practice (see Blumenfeld-James Decl., Ex. B, p. 7), Ms. Luckett said she “did research on it and I read the medical records and talked to the doctors for a recommendation.” (Id. at Ex. A, pp. 220-224.)</p> <p>The parties’ dispute about the cost of future medical care is a trial issue. The various manners in which such damages are estimated are normally subject to dispute because of the unsettled nature of the medical marketplace. This matter should be addressed through cross-examination.</p> <p>As to loss of future household services, which includes loss of services to children, the motion is denied without prejudice to specific objection at trial to particular items. It would appear that the Plaintiff can recover the value of</p>
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	<p>simple: It did not. Plaintiffs agreed to take Defendants' economist after Ms. Luckett was deposed. (Blumenfeld-James Dec. ¶ 4). Defendants' expert was on vacation from June 1 until June 18. (<i>Id.</i>) As a result, Ms. Dolan has not yet issued her report/opinions. As such, she has had ample time to review the materials and express her opinion. The fact that Ms. Luckett's deposition took place after May 14, 2018, has no prejudicial effects on Defendants." (<i>Id.</i> at p. 3.)</p> <p>Ms. Luckett is qualified and has never been disqualified as an expert: "Karen Luckett is an experienced life care planner, who followed the normal process of life care planning in this case. Defendants allege that because she has not worked with many cases involving an individual diagnosed with mesothelioma, she is somehow unable to provide an opinion in this case. However, this is not accurate. Life Care Planners, often encounter new injuries or types of care, and are provided with a guideline of how to handle this situation. During her deposition, Ms. Luckett was shown the International Academy of Life Care Planners Standards of Practice by defense counsel. (Blumenfeld-James Dec. Exhibit B). This is the guideline that explains how a life care planner would handle a new situation. And as Ms. Luckett explained, she did exactly that in this case[.]" (<i>Id.</i> at p. 4; see also <i>id.</i> at pp. 5-6.)</p> <p>Ms. Luckett's opinions regarding the costs of future medical care should be addressed by cross-examination, not exclusion. (See <i>id.</i> at p. 7.)</p> <p>Plaintiffs are entitled to recover loss of future household services: "the annotated CACI explains that Plaintiffs are entitled to future loss of household services when the injury occurs, which is now. As the Court explained in <i>Overly v. Ingalls Shipyard, Inc.</i>, which is cited in CACI: ["Although the parties do not distinguish between</p>	<p>services that she would have provided to her son during her lifetime had there not been the injury alleged.</p> <p>The Court does grant the motion in part to exclude the claimed damages for the loss of the ability to pay college tuition. Among other things, this represents a double recovery for loss of income. Damages for grief counseling are likewise excluded as they do not appear to be proximately caused by the event at issue. Rather, they are an ineluctable fact of life irrespective of the cause or timing of a parent's death.</p>
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		<p>the different types of lost years damages that were awarded, we note that lost household services damages, are different than other types of future earnings included in this category. Generally household services damages represent the detriment suffered when injury prevents a person from contributing some or all of his or her customary services to the family unit. The justification for awarding this type of damage as compensated for the value of the services he would have performed during the lost years which, because of the injury, will now have to be performed by someone else.[']” (Id.)</p> <p>“Ms. Luckett’s opinions regarding Ms. Weirick’s children fall under “household services” component of the Ms. Weirick’s future economic damages. Plaintiffs’ household services include services she contributes to the family unit, and here the family unit includes a three minor children, one of whom is autistic. As stated above, “(g)enerally household services damages represent the detriment suffered when injury prevents a person <i>from contributing some or all of his or her customary services to the family unit.</i> (Overly at 174 (emphasis added).)” (Id. at p. 8.)</p> <p>“While the value of household services can be calculated using statistical data regarding the contributions of an “average” provider, California also recognizes that the economic value of a particular individual’s contribution may, on a case-by-case basis, be more or less than the average. An expert may rely not just on estimates derived from statistical data but actual, case-specific evidence. (<i>McKinney v. California Portland Cement Co.</i> (2002) 96 Cal.App.4th 1214, 1229.) The specifics of this particular case demonstrate that Carolyn Weirick’s contribution to her household was substantially greater than the average, and the life care plan supports plaintiffs’ ability, through their experts, to meet their burden of proving the reasonable value of all potential loss.” (Id.)</p>	
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		<p>“But for Ms. Weirick’s diagnosis with mesothelioma, she would have continued to work to support both her wife and her sons. Her future inability to provide income and other support for the additional costs and expenses associated with her sons was caused by the disease which resulted from defendants’ negligence and strict liability. Defendant should not be able to sidestep the peculiarities of this family’s situation. Stated otherwise, Carolyn Weirick’s family situation is an “eggshell” situation, whereby defendant must take him as they find him and, in this case, they must take the financial burden occasioned by her disease and eventual death.” (Id. at pp. 8-9.)</p>	
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No.	What to Exclude	Arguments	Ruling
25	Opinions and testimony by Plaintiffs’ expert William Longo.	<p>Defendants contend:</p> <p>“Over the last year, Dr. Longo has received 35 containers of purported J&J talcum powder products from various sources, including three different plaintiff law firms. Those law firms obtained these containers from a hodgepodge of sources: some came from unrelated plaintiffs, others came from unidentified “collectors,” and still others were purchased on sites like eBay. Most had been opened and used before Dr. Longo received them for testing. Dr. Longo purports to have found trace levels of “asbestos” in 20 out of 35 samples that he tested.” (Motion, p. 1.)</p> <p>“Dr. Longo’s testing of the samples was unreliable at every step and must be excluded. First, Plaintiffs have failed to establish that the samples Dr. Longo analyzed contained the J&J Defendants’ talcum powder in its original, unaltered condition. Most of the samples are more than a half-century old, and there is no information about how they were handled or stored before Dr.</p>	<p>Denied in part; Granted in part:</p> <p>The first issue regards chain of custody. Dr. Longo ultimately tested 35 Johnson & Johnson containers – 32 Baby Powder and three Shower-to-Shower. (See Opposition, p. 7.) Confusingly, portions of the parties’ briefs discuss 30 containers while other portions discuss 35.</p> <p>Expert testimony about tested samples may be excluded based on a “chain of custody” claim. (See <i>People v. Catlin</i></p>

	<p>Longo received them—other than that most had been opened. There is a real risk that the samples Dr. Longo tested were contaminated after they were manufactured and sold. This is a particularly troubling possibility because Dr. Longo identified richterite—a mineral not known to be present in the talc mines at issue but present in insulation in the 1970s—in some of the samples and did not identify amphiboles in any brand new, “off-the-shelf,” sealed samples that he tested. Similarly, because it is possible for people to refill talcum powder containers, there is a real risk that the products Dr. Longo tested were not manufactured by the J&J Defendants at all.” (Id.; see also id. at pp. 4-11.)</p> <p>“In sum, serious chain of custody issues make it impossible to know whether Dr. Longo was in fact testing the J&J Defendants’ talcum powder in its original, unaltered condition. As a result, his testing must be excluded, as two other California courts and additional courts in other jurisdictions have concluded with respect to similar testing conducted under similar circumstances.” (Id. at pp. 1-2; see also id. at pp. 4-11.)</p> <p>“Second, Dr. Longo did not adhere to a generally accepted methodology for identifying asbestos. Dr. Longo performed an analysis that he admits is incapable of distinguishing between asbestiform and non-asbestiform fibers—in other words, between minerals that are asbestos and minerals that are not. Instead, Longo assumes that the amphibole particles he detected were asbestos even though the asbestiform varieties of these minerals are exceedingly rare, and has repeatedly been unable to point to any support for this assumption. He further assumes, without foundation and indeed contrary to his findings, that the purported contamination he identifies is homogeneous throughout the tested samples.” (Id. at p. 2; see also id. at pp. 11-16.)</p>	<p>(2001) 26 Cal.4th 81, 134.) “In a chain of custody claim, “[t]he burden on the party offering the evidence is to show to the satisfaction of the trial court that, taking all the circumstances into account including the ease or difficulty with which the particular evidence could have been altered, it is reasonably certain that there was no alteration. [¶] The requirement of reasonable certainty is not met when some vital link in the chain of possession is not accounted for, because then it is as likely as not that the evidence analyzed was not the evidence originally received. Left to such speculation the court must exclude the evidence. [Citations.] Conversely, when it is the barest speculation that there was tampering, it is proper to admit the evidence and let what doubt remains go to its weight.” [Citations.]” (Id.)</p> <p>In this case, the contamination alleged is a very low level, so low that it is detectable only by</p>
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	<p>“Third, Dr. Longo cannot extrapolate the results of his analysis of the samples to conclude that the talcum powder Ms. Weirick actually used would have been contaminated with asbestos. He conducts no analysis, statistical or otherwise, to reach this conclusion. Dr. Longo is not entitled to simply guess that his test results are applicable to the Johnson’s Baby Powder or Shower to Shower actually used by Ms. Weirick.” (Id. at p. 2; see also id. at pp. 16-19.)</p> <p>“Finally, Dr. Longo has issued multiple reports and supplemental reports in this case, all of which set forth the results of one test method for identifying amphibole particles: TEM analysis. Because Dr. Longo has never referred to any other testing in his reports and deposition, he should be precluded about doing so at trial.” (Id. at p. 2; see also id. at pp. 19-20.)</p> <p>Chanel contends:</p> <p>Chanel filed a separate motion in limine concerning Dr. Longo. It is Chanel’s motion in limine no. 29. Chanel contends Dr. Longo should be excluded because (1) he admitted that he never tested a Chanel product, (2) he did not review tests from other labs that detected asbestos in Chanel products, (3) he “had no information about the source of any talc incorporated into Chanel No. 5, including whether Chanel ever sourced its talc from the Vermont mine that many of the samples Dr. Longo tested contained[,]” and (4) “he conceded that asbestos contamination within talc mines is inconsistent and varied.” (Chanel MIL No. 29, p. 1.)</p> <p>Plaintiffs contend:</p> <p>“At least four courts, two in Los Angeles County, California, one in Middlesex County, New Jersey, and one in Darlington County,</p>	<p>the Plaintiffs’ experts using electronic microscopes. As such it is necessary that there be some assurance that the sample was free from the possibility of contamination from any number of sources.</p> <p>Here, the samples came from multiple sources (clients, collectors, and off-the-shelf purchases by the plaintiff firms) and multiple eras (unknown, 1950s, 1960s, 1970s, 1990s, 2000s, and 2010s). Plaintiffs claim “Dr. Longo has chain of custody documentation for each of the 30 [now 35] samples he tested.” (Opposition, p. 15.) They cite Dr. Longo’s expert report, sections 2, 3, and 4. (See id. at p. 15 n. 66.) These sections contain transport slips that merely identify the person who sent the sample, by UPS or FedEx, and the person who received the delivery. (See Stewart Decl., Ex. A.) The testing charts, similarly, say nothing about chain of custody. (See id. at Ex. 9, pp. 3-4, 9-22.) None of this</p>
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	<p>South Carolina, have considered and denied Johnson & Johnson's challenges to Dr. Longo's opinions. In the first mesothelioma trial against Johnson & Johnson, Judge Simpson ruled that based on the extensive documentation before him, a 402 hearing was unnecessary and Dr. Longo would be allowed to testify as to his testing of the historical samples. Similarly, Judge Ana Viscomi, in the state court of New Jersey, after hearing Dr. Longo's testimony during a full contested hearing, ordered that 'What the Court found compelling was the testimony of Dr. Longo insofar as he found that by doing the testing, the consistency of the product throughout and some of the tests that he conducted revealed the presence of asbestos. Some did not and so based upon his argument as to the consistency, which the Court found compelling, as to it being an indicia of reliability, the Court finds that it would be appropriate to deny the motion to exclude, allow the testimony, but certainly there are issues that would go to the weight of the evidence.'" (Opposition, p. 1.)</p> <p>"In South Carolina, Dr. Longo was permitted to testify regarding his analyses of Johnson & Johnson baby powder that included talc from the Vermont mine. The samples about which he was permitted to testify were limited to the Vermont talc due to the plaintiff's exposure occurring only during years in which that talc was incorporated into Johnson's Baby Powder." (Id. at pp. 1-2.) In West Covina, Judge Gloria White-Brown overruled all of Johnson & Johnson's objections to Dr. Longo's testimony in the Anderson trial. Notably, Johnson & Johnson has requested in the alternative a 402 hearing regarding Dr. Longo; in the Anderson case, with Dr. Longo literally waiting in the hall, counsel for Johnson & Johnson waived this request. In the ongoing Brick v. Johnson & Johnson matter, Johnson & Johnson and Plaintiffs' counsel reached an agreement permitting Dr. Longo regarding the exact same testing at issue in the instant Motion." (Id. at pp. 1-2.)</p>	<p>evidence clears up the gap between the manufacture dates and the testing dates. Plaintiffs' showing fails to explain how the samples were stored, repackaged, delivered, etc. (See Opposition, pp. 9-10.)</p> <p>On this record, under California law, this Court finds Plaintiffs' "chain of custody" showing inadequate. The motion is granted as to the test results for these samples and Dr. Longo's related testimony and opinions. Given the low levels of asbestos to which the Plaintiffs' experts are referring, the samples must have a chain of custody that prevents contamination.</p> <p>As for Defendants' other arguments, the gatekeeper role of a court "is to make certain that an expert, whether basing testimony upon professional studies or personal experience, employs in the courtroom the same level of intellectual rigor that characterizes the practice of an expert in the relevant</p>
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	<p>identified. He complied with the EPA/AHERA counting protocol for regulated asbestos fibers.⁶¹ As discussed and established in connection with Plaintiff's Motion in Limine #14, no asbestos counting methods require a prerequisite geological finding that a regulated particle is "asbestiform" or not, including AHERA. "Asbestiform" is a commercial geological distinction designed to designate certain asbestos deposits as commercially desirable or not. It has zero relevance to the health hazard of the material." (Id. at p. 12.)</p> <p>Dr. Longo may rely on "off the shelf" and historical samples: "There are five reasons why Dr. Longo may rely upon the samples he tested. First, as an expert material scientist, Dr. Longo and countless other researchers routinely rely upon historical samples to determine their contents. Second, the samples are what they purport to be: Johnson & Johnson talc with no signs or allegations that they are contaminated or have ever been tampered with. Third, ten samples for which there can be no "authenticity" challenge (off the shelf and client-owned samples) are consistent in every way with the other twenty samples. Another sample was obtained directly from Johnson & Johnson. Fourth, Dr. Longo took an extra step to confirm the uniformity of the samples by running a particle size distribution analysis. Fifth, the results are precisely in line with dozens of Johnson & Johnson's internal tests, third party testing, and admissions." (Id. at p. 15; see also id. at pp. 16-22.)</p> <p>Experts reasonably rely on "off the shelf" and historical samples. (See id. at pp. 22-24.)</p> <p>Authentication is unnecessary since Plaintiffs do not seek to introduce the talc ore or historical containers. (See id. at pp. 24-27.)</p>	<p>opinion is based on a leap of logic or conjecture. The court does not resolve scientific controversies. Rather, it conducts a 'circumscribed inquiry' to 'determine whether, as a matter of logic, the studies and information cited by experts adequately support the conclusion that the expert's general theory or technique is valid.'" (Id.)</p> <p>"If the opinion is based on materials on which the expert may reasonably rely and is grounded in logic flowing from those materials, the opinion should be allowed even when the court or other experts disagree with its conclusion or the methods and materials used to arrive at it." (Wegner et al., Cal. Practice Guide: Civil Trials and Evidence (The Rutter Group 2018) ¶ 11:77.)</p> <p>Defendants contend Dr. Longo failed to "adhere to a generally accepted methodology for identifying asbestos." (Motion, p. 2.)</p>
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		<p>California law permits experts to rely on historical samples; and Dr. Longo has adequate foundation to testify about Ms. Weirick's exposures. (See id. at pp. 27-28.)</p> <p>Plaintiffs properly disclosed Dr. Longo's SEM analysis. (See id. at p. 29.)</p> <p>As to Chanel, Dr. Longo will not testify directly that talc used in Chanel products contained asbestos, but he may answer hypothetical questions that ask him to assume Chanel used Italian talc in Chanel No. 5. He will be able to lay foundation to answer the hypotheticals. (See id. at p. 30.)</p>	<p>Under <i>Sargon</i>, the Court is not supposed to pick one scientific method over another; the Court's role, simply, is to determine whether the expert used a recognized, viable method. There is at least some evidence that defendants' experts and consultants have used these methods. (See Opposition, p. 7; see also, e.g., Blumenfeld-James Decl., Ex. 6.) A defense geology expert, Mickey Gunter, said he had no criticism of the "Blount Method." (See id. at Ex. 17, pp. 165-166.)</p> <p>Dr. Longo also utilizes scanning electron microscopy ("SEM"). Defendants suggest his SEM findings should be excluded because Plaintiffs failed to disclose his SEM analysis. The Court declines to adopt the argument because Dr. Longo testified about his SEM findings at his deposition, and Defendants cross-examined him. (See Opposition, p. 29; see also</p>
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			<p>Blumenfeld-James Decl., Ex. 40.)</p> <p>Dr. Longo's counting methodology also appears to be a matter of legitimate scientific debate, at least on this record.</p> <p>Accordingly, the motion is denied as to Dr. Longo's methodology, his use of TEM and SEM, and his counting methodology. This is a scientific debate that the Court cannot resolve as a matter of law.</p> <p>Dr. Longo's ability to extrapolate requires different analysis. Dr. Longo's expert report states: "Based on the results of our analysis, it can be stated, that individuals who used Johnson & Johnson's Baby Powder or Valiant Shower to Shower talc products would have, more likely than not, been exposed to fibrous amphibole asbestos. (See Stewart Decl., Ex. A, p. 25.) He reached this opinion by detecting asbestos in 17 of</p>
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			<p>30 containers. (See id. at Ex. A, pp. 2, 23.) Plaintiffs fail to show how these results provide a reliable means to extrapolate a likelihood of asbestos contamination and exposures above background levels. A 57% positive rate among containers lacking “chain of custody” evidence is a dubious foundation. The opposition papers fail to cure this deficiency. Dr. Longo’s extrapolation of general conclusions about the product from these samples is excluded.</p> <p>Plaintiffs did address Chanel’s separate argument, and quoted the foundation for Dr. Longo’s opinion that the product contains asbestos. This foundation is inadequate to support the opinion given, and that opinion is excluded.</p>
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No.	What to Exclude	Arguments	Ruling
27	Opinions and testimony by	Defendants contend:	Denied in part; Granted in part:

	<p>Plaintiffs' expert Dr. Steven Compton.</p>	<p>Dr. Steven Compton did not test any sample actually used by Ms. Weirick. He tested 13 samples obtained by Alan Seagrave from the Italian mines and 15 samples from the Argonaut mine in Vermont. He intends to testify that the samples contained asbestos. He also intends to testify that (1) all or most talc from the mines contained asbestos, and (2) because of the extensive contamination, the bottles used by Ms. Weirick must have contained asbestos.</p> <p>His testimony should be excluded because (1) he used an improper methodology that failed to determine whether the fibers he observed constituted asbestiform, and (2) his opinion that all or most talc from the mines contained asbestos is based on speculation and conjecture. His testing of a few samples is insufficient to support this leap. (See Motion, pp. 1-2; see also <i>id.</i> at pp. 4-8.)</p> <p>The Court should prohibit Dr. Compton from testifying about Chinese mines and the Hamm and Rainbow Vermont mines because he did not test samples from these sources. (See <i>id.</i> at pp. 8-9.)</p> <p>Chanel contends:</p> <p>Chanel filed a separate motion in limine – Chanel motion in limine no. 30. Chanel contends “[t]here are many issues with Dr. Compton’s opinions and anticipated testimony. First, Dr. Compton’s methodology was improper, is not generally accepted by the scientific community, and is therefore unreliable. Dr. Compton is also not a geologist with the requisite educational background to opine on the morphology and geological components of the minerals he tested. On those bases alone, Dr. Compton’s opinions and testimony attendant to his testing of Italian talc should be excluded from trial. Moreover, specifically as to Chanel, Dr. Compton has no basis to offer any opinions that Chanel</p>	<p>Defendants do not assert a “chain of custody” claim. It’s undisputed that Dr. Compton received the talc samples from Defendants’ experts.</p> <p>Defendants contend Dr. Compton employed an unscientific methodology. They claim he admitted that his methodology “does not distinguish between the asbestos and non-asbestos varieties of the amphibole minerals he identified.” (Motion, p. 2.) Defendants say this is a problem “because the EPA and ISO [International Organization for Standardization] methods that Dr. Compton claims to be following make that distinction – they define ‘asbestos’ as the <i>asbestiform</i> version of the mineral.” (Motion, p. 2.)</p> <p>Again, the Court’s role under <i>Sargon</i> 2012) 55 Cal.4th 747 is to determine whether the expert used a recognized, viable scientific method, not to choose one method over another.</p>
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	<p>No. 5 was contaminated with asbestos. Dr. Compton has only tested Italian talc. He has not tested a Chanel product for this case, despite having one in his very possession. Dr. Compton further testified during his deposition that he does not know the origin of the talc incorporated into any Chanel No. 5, and has not formed the opinion that any Chanel product has ever contained asbestos. Accordingly, even assuming Dr. Compton's findings of asbestos in some of the Italian talc tested are accurate and reliable – which, as will be explained in greater detail below, they are not – there is absolutely no foundation for Plaintiffs to assert that Dr. Compton's testing of Italian talc therefore establishes that the talc incorporated into Chanel No. 5 was necessarily contaminated with asbestos. Just because Dr. Compton allegedly found asbestos in <i>some</i> (not all) of the Italian talc samples he tested using unreliable methodologies, does not therefore mean that <i>all</i> Italian talc incorporated into talcum powder products were contaminated.” (Chanel's Motion, pp. 1-2.)</p> <p>Plaintiffs contend:</p> <p>“[N]ear the end of 2015, Imerys' lawyers hired two expert geologists/mineralogists (Alan Segrave and Defendants' expert Matthew Sanchez, Ph.D.), provided them a paid trip to Italy, and gave them a tour of the talc mines in Val Chisone/Val Germanasca. Segrave and Sanchez collected samples of talc and associated minerals they considered representative of the Italian-mined talc historically sold by Imerys and its predecessors to Johnson & Johnson and many other talc product manufacturers. Segrave and Sanchez analyzed the samples and submitted reports to Imerys's lawyers, concluding that talc produced from the Italian mines did not now and had never contained asbestos.¹ Segrave produced his samples to Plaintiffs' expert Dr. Compton for analysis. Dr.</p>	<p>At this point, this court cannot say that Dr. Compton's methods are so unreliable that the jury should not be able to consider them. This is a matter best demonstrated through oppositional evidence or cross-examination as both parties' experts will be examining essentially the same samples.</p> <p>Likewise, on this record, the Court cannot determine that Dr. Compton's counting rules are so unreliable that they must be excluded. The appropriateness appears to be the subject of a debate between the parties' witnesses, and an issue for the trier of fact.</p> <p>At this point, the testing methodology employed by Dr. Compton seems reasonably subject to scientific dispute, and the Court declines to exclude it under <i>Sargon</i>.</p> <p>In summary, the Court denies the motion as to Dr. Compton's methodology and counting methodology.</p>
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	<p>Compton found that 11 of 13 samples did, in fact, contain asbestos.” (Opposition, p. 2.)</p> <p>“Dr. Compton also recently tested 15 samples he received from Dr. Sanchez, initially collected by Johnson & Johnson expert Mickey Gunter from the Argonaut mine in Vermont.³ Dr. Compton detected amphibole fibers in ten of the fifteen samples, including 6 of the 7 talc samples provided. . . . As a preliminary matter, it must be noted that very similar motions against Dr. Compton have been filed in multiple talc trials, and either rejected by the court or waived by the Defendants each time.” (Id. at pp. 2-3.)</p> <p>“In the Herford case tried in October of 2017 in Pasadena in front of Judge C. Edward Simpson, the Court allowed Dr. Compton to testify about his testing of Mr. Segrave’s Italian samples: “I think [Dr. Compton] can testify about his tests, what he tested, and I think he might also be able to testify that based upon his tests the mine from which the product was taken contained asbestos.” In the recent Anderson trial, Defendant J&J filed a similar motion in limine, but chose not to argue the MIL. Dr. Compton testified regarding his analysis of both the Italian source ore and the Vermont source ore, and was subject to cross-examination regarding these tests. In the Brick matter, currently in trial in Los Angeles County before Judge Stephen Moloney, Defendants J&J and Imerys filed a similar MIL, but an agreement was reached pursuant to which Dr. Compton was permitted to testify regarding his analysis of both Italian and Vermont mine samples. Finally, in the Lyons matter, recently in trial in San Francisco, Defendant Colgate’s challenge to Dr. Compton’s analysis of the Italian samples (again, the Vermont samples were not at issue) was summarily denied.” (Id. at p. 3.)</p>	<p>As to the extrapolation opinions of Dr. Compton, the Court grants the motion based upon the same analysis as contained in Motion in Limine 25. The analysis appears to be a logical leap that cannot be supported by quantitative analysis. Plaintiffs do not appear to oppose this aspect of the motion.</p> <p>The Court excludes opinions about the content of the actual containers of talc used by Ms. Weirick. Plaintiffs do not appear to oppose this aspect of the motion.</p> <p>The Court excludes opinions about the Guagxi region of China or the Hamm or Rainbow mines in Vermont. Plaintiffs do not seem to oppose this aspect of the motion.</p> <p>As with motion 25, there is insufficient foundation for Dr. Compton to testify regarding Chanel’s product, and his</p>
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	<p>Dr. Compton utilized accepted scientific testing methods: “J&J has seized upon one sentence taken out of context in the method that Dr. Compton uses from his tests, ISO 10312. They claim that the method cannot distinguish between asbestos and non-asbestos, and therefore is an unreliable method. Their critiques are clearly taken out of context. ISO stands for the International Organization for Standardization, and is one of the primary international organizations that promulgates testing methodology. The title of the particular method that Dr. Compton uses is: “Ambient air - Determination of asbestos fibers- Direct transfer transmission electron microscopy method.”¹⁶ (Emphasis added) So the method that Defendants vehemently claim cannot ever determine the presence of asbestos fibers was actually created for the explicit purpose of doing just that.” (Id. at p. 5.)</p> <p>“In addition, the ISO includes this language in the introduction to the method that Dr. Compton utilizes: ‘This international Standard is based on transmission electron microscopy, which has adequate resolution to allow detection of small fibers, and is currently the only technique capable of unequivocal identification of the majority of individual fibers of asbestos.’” (Id.)</p> <p>Dr. Compton utilized ISO 10312 to analyze the talc samples received from Alan Segrave for the presence of asbestos. While the Defendants lawyers spend several pages of their motion complaining that Dr. Compton “did not apply a scientific methodology to identify asbestos,”¹⁹ their retained experts do not share that view. Mickey Gunter, an expert who has been retained in other cosmetic talc cases by J&J, was particularly clear on this point when testifying about Dr. Compton’s methodology in analyzing the Italian talc samples: Q. With regard to Dr. Compton’s analysis of the samples that he obtained, do you have any criticism of the methodology that he used in doing so? A. Maybe not the</p>	<p>opinions regarding the Chanel product, if any, are excluded.</p>
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		<p>methodology, but the results.” (Id. at pp. 5-6.) “Dr. Compton employed the same methodology in analyzing the Vermont samples, collected by the same Mickey Gunter who endorsed that method with respect to the Italian samples.” (Id. at p. 6.)</p> <p>Dr. Compton’s analysis of samples from the Italian mines is a reliable basis for his exposure and causation opinions: “Although Defendants’ Motion combines the representativeness of the Italian talc samples and the Vermont talc samples into one issue, in fact these are very distinct. Dr. Compton, relying on the type of materials on which experts in his field typically relies, has an adequate foundation to opine that the Italian talc samples he analyzed are representative of the current and past mining output of the Italian talc mines that provided talc that was incorporated into Johnson and Johnson talc products, Chanel talc products, and numerous other brands of talc products. Because he has not reviewed similar evidence of the representativeness of the Vermont talc samples, he will not offer any opinions on that issue.” (Id. at p. 9.)</p> <p>“As described above, the Italian talc samples Dr. Compton tested that form the basis of his report²⁶ were obtained from Italy by Alan Segrave, a geologist hired by Imerys²⁷ and also retained by Chanel in this case. Defendants’ attorneys criticize Dr. Compton for extrapolating from the findings based on these samples to the mine as a whole, both in terms of its presentday and historical composition. Yet that is exactly what Mr. Segrave, in his report to Imerys’ attorneys, concluded. Segrave described the ‘current mining activity of the Fontane deposit as a homogenous talc horizon’ and, moreover, concluded that ‘the talc deposit is homogenous throughout for past-mined horizons having similar carbonate purity.’” (Id.)</p>	
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		<p>“Mr. Segrave’s testimony in a recent deposition makes perfectly clear that the samples he collected (in which Dr. Compton found asbestos, and Mr. Segrave reported none) are representative of all Italian talc ever produced from that mine[.]” (Id. at p. 10.)</p> <p>“Accordingly, Dr. Compton’s opinion regarding the asbestos content of the Italian talc mines are based on his own analysis of samples from that mine that, in the stated opinion of Imerys’ and Chanel’s own retained expert Alan Segarve, are representative of current and historical talc mining. Dr. Compton does not profess to have undertaken any geological analysis of the mine to determine the representativeness of the samples. To the extent that Defendants’ attorneys want to impeach the opinion of their own retained witness Alan Segrave, they certainly are free to do so. But under Evidence Code Sec. 801, the stated opinion of Mr. Segrave is “of a type that reasonably may be relied upon by an expert in forming an opinion upon the subject to which his testimony relates,” and Dr. Compton is certainly justified in relying on aspects of the study commissioned and paid for by Imerys. Dr. Compton’s testimony should be allowed.” (Id. at pp. 10-11.)</p> <p>Chanel: “In addition to similar methodological criticisms raised by Defendants Imerys and Johnson and Johnson, Chanel also urges exclusion of Dr. Compton’s Italian talc opinions because he testified in deposition that “1) he had not conducted any testing on a Chanel product attendant to this case; 2) he did not know the source of talc incorporated into Chanel No. 5; and 3) he had no opinion as to whether Chanel No. 5 has ever been contaminated with asbestos.”³⁰ Plaintiffs will not elicit any opinions from Dr. Compton that contradict his deposition testimony, but will ask Dr. Compton hypothetical questions based on the evidence in this case. Specifically, after Dr. Compton was deposed, Chanel’s corporate representative Amy Wyatt confirmed in her deposition that Chanel No. 5 body powder used Italian talc until 2010.” (Id. at p. 11.)</p>	
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No.	What to Exclude	Arguments	Ruling
28	Opinions and testimony by Plaintiffs' expert Dr. James Webber.	<p>Defendants contend:</p> <p>The Court should exclude Dr. James Webber and his report because he appeared for one day of deposition, the deposition did not finish, and Plaintiffs failed to offer him for another day of deposition before the expert discovery closed. (See Motion, p. 1; see also id. at pp. 2-4.)</p> <p>Dr. Webber intends to testify that, in the 1970s, the cosmetics industry "confounded" the FDA's attempt to "develop a sensitive and reliable method for detecting asbestos in talc[.]" (Id.) His opinion and testimony "about the actions and motivations of the cosmetics industry . . . are not a proper subject for expert testimony." (Id. at p. 1; see also id. at pp. 4-6.)</p> <p>The Court also should exclude Dr. Webber because he is unqualified to testify about the FDA's interactions with the cosmetics industry in the 1970s. (See id. at pp. 2, 7-8.)</p> <p>Plaintiffs contend:</p> <p>"Imerys has argued, and intends to argue to the jury, that the FDA has given its talc some seal of approval based on testing of their products and lack of required warnings. However, what Imerys failed to disclose is the genesis of the method used and the cosmetic talc industry's efforts in thwarting development of a sensitive and reliable method. Dr. James Webber – an environmental health scientist, regulator, and microscopist with decades of experience developing methods for the detection of asbestos in materials - is qualified as an expert to provide the jury</p>	<p>Denied:</p> <p>Defendants' argument – Dr. Webber should be excluded because he failed to finish his deposition – should be resolved by the time of trial. In his expert report, Dr. Webber opines that the talc industry "obstruct[ed]" the FDA's efforts to develop an asbestos-detection method for talc. (Id. at Ex. B, p. 13.) Defendants argue this is an "[im]proper subject for expert testimony[.]" citing federal district court rulings from New York, Florida, Minnesota, and Pennsylvania. (Motion, p. 1.)</p> <p>"Expert opinion testimony is 'helpful' (and, therefore, 'permissible') where the subject matter is sufficiently beyond the scope of common experience to be of assistance to the trier of fact." (Wegner et al., Cal. Practice Guide: Civil Trials and Evidence (The Rutter Group 2018) ¶ 8:701.)</p>

	<p>an opinion regarding the development of the methods used for detection of asbestos in talc and the cosmetic talc industry's role in confounded regulatory agency efforts as such information is well beyond the common experience of the jury.” (Opposition, p. 2.)</p> <p>All parties had the opportunity to depose Dr. Webber: “Dr. Webber has already given two depositions in this case, with a third day of deposition scheduled for June 11. The first day of his deposition took place on April 6, 2018, with questioning by counsel for Johnson & Johnson. His second day of deposition occurred on May 25, 2018, when he was further questioned by Johnson & Johnson and also by counsel for Imerys. Between these two depositions, Dr. Webber underwent surgery for a complete knee replacement and was medically unavailable to testify.¹ Notably, Johnson & Johnson and Imerys both stipulated that their questioning of Dr. Webber was complete as of May 25, 2018, barring any need for follow-up based on testimony elicited by counsel for Chanel in the final session of his deposition.² Accordingly, as all parties will have had the opportunity to depose Dr. Webber regarding his opinions in this matter and in light of Dr. Webber’s medical treatment between deposition sessions, Dr. Webber should not be precluded from testifying based on the incompleteness of his deposition.” (Id. at pp. 2-3.)</p> <p>Dr. Webber is qualified: “Plaintiffs’ expert, Dr. James Webber is an environmental health scientist specializing in the measurement and analysis of materials, determining the constituent ingredients in materials, and characterizing those materials and ingredients from a laboratory and public health perspective.³ Dr. Webber’s expertise spans over 40 years and includes asbestos research, asbestos analysis, certification of laboratories for asbestos testing and analysis, environmental chemistry, standards and regulation development, aerosol research, and trace metal analysis. (See</p>	<p>“The jury need not be wholly ignorant of the subject matter of the opinion ... if that were the test, little expert opinion testimony would ever be heard. Instead, the statute declares that <i>even if the jury has some knowledge</i> of the matter, expert opinion may be admitted whenever it would ‘assist’ the jury.” (Id. [emphasis in original].) This is a liberal standard. “Expert opinion testimony is excluded ‘only when it would add <i>nothing at all</i> to the jury’s common fund of information.” (Id. at ¶ 8:728 [emphasis in original].)</p> <p>As to this specific opinion, the Court grants the motion. It is an argumentative viewpoint of an advocate based upon historical events. Dr. Webber may be a helpful witness in authenticating certain historical events. He may even be a witness to some of them. The argument regarding the import of the events is better left to the lawyers.</p>
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		<p>Exhibit A at 1-4.) Dr. Webber has expertise in the analysis of various substances, including asbestos and talc, through the use of various analytical methodologies and equipment including x-ray diffraction (XRD), polarized light microscopy (PLM) phase contrast microscopy (PCM) and transmission electron microscopy (TEM) with selected area electron diffraction (SAED) and Electron Dispersive Spectroscopy (EDS). (Id.) He has conducted analysis for asbestos (measurement, identification, quantification) in thousands of samples of various products and materials in the public and private sector, and trained other technicians to do so as well. (Id.) Dr. Webber received his Ph.D. from the School of Public Health at the State University of New York at Albany in 1999 based on his dissertation A Paleolimnological Reconstruction of Airborne Asbestos Concentrations in the Fibrous-Talc Region of St. Lawrence County, New York, from 1872 to 1998, relating to asbestos in talc and exposure in the environment as a result.⁴” (Id. at pp. 3-4.)</p> <p>“Johnson and Johnson asserts that Dr. Webber is not qualified to offer an opinion regarding the development of "a sensitive and reliable method for detection of asbestos in talc" by the Food & Drug Administration (FDA) (Motion at 4.) What Defendants’ fails to note is that Dr. Webber has spent vast majority of his career - 33 years - in the regulatory sphere developing methods for the detection of asbestos in products and materials, water, soil, and air. At the New York State Department of Health, Dr. Webber worked directly with federal regulatory agencies, including the Environmental Protection Agency, in developing methods for detection of asbestos[.]” (Id. at p. 4.) “Indeed, as part of the methods development work Dr. Webber did as a regulator, he specifically developed programs to test the efficacy of these methods, the very same methods being considered by the FDA in</p>	
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		<p>the 1970's⁶ , upon which he offers an opinion in this case[.]” (Id. at p. 5.)</p> <p>“Dr. Webber has been qualified as an expert regarding asbestos in talc, methods for detection of asbestos in talc, and industry's role in shaping and confounding those methods in our California courts as well as in New Jersey⁸ and New York⁹ . This case is no different and Defendants’ has failed to show otherwise. Last year, Dr. Webber offered the same opinion Defendants’ now seek to preclude in the Polakow matter before the Honorable H. Chester Horn,¹⁰ the Depoian matter before the Honorable Charles F. Palmer¹¹, and the Blount matter before the Honorable Randolph Rhoades¹².” (Id. at p. 7.)</p> <p>Dr. Webber’s opinions concerning the cosmetic industry’s efforts to “confound” the FDA are a proper subject of expert testimony: “[E]ven if, as Defendants’ argues, the jurors are able to read the same industry documents and published methods as Dr. Webber, certainly the intricate details and implications of each analytical method, their development, significance of the cosmetic talc industry's involvement in their development, and the consequences are well beyond "the common knowledge that men of ordinary education could reach a conclusion as intelligently" as Dr. Webber. The Polakow, Depoian, and Blount courts agreed that Dr. Webber's specific opinion Defendants’seek to exclude is "sufficiently beyond common experience” and “would assist the trier of fact” (See Exhibits D, I, J & K). Johnson and Johnson offers only nonbinding opinions from out-of-state courts to support its assertion that our courts require something other than exclusion only when an expert’s opinion “would add nothing at all to the jury’s common fund of information.” (McDonald (1984) 37 Cal.3d at 367).” (Id. at p. 10; see also id. at pp. 11-14.)</p>	
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No.	What to Exclude	Arguments	Ruling
29	Opinions and testimony by Plaintiffs' expert Dr. John Maddox.	<p>Defendants contend:</p> <p>Dr. John Maddox intends to testify that the Johnson & Johnson and Chanel products used by Ms. Weirick caused her injuries. (See Motion, p. 1.) Dr. Maddox's opinions should be excluded because he relied on Dr. Longo's and Dr. Compton's flawed testing results. Particularly, Dr. Maddox relied on Dr. Longo's and Dr. Compton's unsupported conclusions that all or most talc from the source mines, as well as the finished products Ms. Weirick used, contained asbestos. (See Motion, pp. 1, 4-10.)</p> <p>Additionally, Dr. Maddox's opinions ignore the universe of other testing results conducted by universities, government agencies, Defendants, and independent labs. (See id. at p. 10.)</p> <p>Plaintiffs contend:</p> <p>"Defendants falsely assert that Dr. Maddox only relied on the works of Dr. Longo and Dr. Compton for his opinion. This is simply not the case. In his deposition, Dr. Maddox clearly details some of the materials he relies on for his opinion that consumer talcum powders, such as those manufactured by Johnson and Johnson and Chanel, are routinely contaminated with asbestos." (Opposition, p. 3.) "At the start, Dr. Maddox provided a list of reliance articles that support his various opinions." (Id.) "The list is 55 pages, and contains approximately 30 articles are listed in the "Talc" section. Defendants' assertion that Dr. Maddox solely relies on the works of Dr. Longo and Dr. Compton is disingenuous and without support. Dr. Maddox outlines in his reference list all of the articles on which he relies." (Id. at p. 4.) "Furthermore, when asked about specific foundation for Dr. Maddox's opinions</p>	<p>Denied without prejudice:</p> <p>Dr. Maddox is a pathologist. Defendants seek to exclude him because he relied on Dr. Longo's and Dr. Compton's "flawed testing" and the "inappropriate extrapolations made by Plaintiffs' counsel from the binomial table created by Plaintiffs' statistician, Dr. Lynne Stokes." (Motion, p. 1.)</p> <p>Defendants concede Dr. Maddox is qualified to "tell the jury that [] Ms. Weirick has developed mesothelioma." (Id.) But they claim he is unqualified to say whether the relevant Johnson & Johnson and Chanel products contained asbestos. They contend Dr. Longo's and Dr. Compton's reports fail to provide Dr. Maddox sufficient foundation to discuss the "frequency with which [Ms. Weirick's] containers were contaminated, the level of contamination, or that her exposures to these products was a substantial</p>

	<p>regarding asbestos content of Johnson and Johnson products and Chanel products, Dr. Maddox cites not just to the work of Dr. Longo and Dr. Compton, but also testing found in defendants' own records, performed by their own consultants, the RJ Lee group[.]” (Id.) “Furthermore, later in his deposition, Dr. Maddox recalled an additional basis for his opinion that Johnson’s baby powder had asbestos, the articles by Dr. Blount, an employee of Johnson and Johnson, who published an article regarding asbestos content of Johnson and Johnson products[.]” (Id. at p. 5.) “Finally, Dr. Maddox specifically cites to the paper by Millette, Fitzgerald and Gordon paper of 2014[.]” (Id. at p. 6.) “Thus, Dr. Maddox relies on a wide variety of materials as foundation for his opinions in this case, including published scientific and medical literature, corporate documents, testing of source ore, and testing of finished products at issue, all of which are the type of documents upon which an occupational medicine physician may reasonably rely. Dr. Maddox’s opinions flow in a reasoned chain of logic from these materials, using appropriate, published methodology.” (Id.)</p> <p>“The issues raised by Defendants in their Motion fall squarely within the realm of vigorous cross-examination, not a 402 hearing. They go to the weight and credibility of evidence (matters for the jury’s consideration), rather than admissibility or sufficiency.” (Id. at p. 7.) “Specifically, the argument that Dr. Maddox’s reliance on the works of Dr. Compton and Dr. Longo cannot be excluded simply because Defendant’s have criticisms of certain aspects of them. There is no justification or legal basis to exclude Dr. Maddox’s reliance of these studies. Medical experts routinely rely on their testing and the scientific work of others as evidence of what does and does not contain asbestos. Dr. Maddox certainly does not have expertise himself to conduct such testing. As such, it is not at all unusual or out of the norm for a Medical expert to rely on testing of others who have the expertise to undertake such</p>	<p>factor in causing her disease.” (Id.)</p> <p>The Court’s rulings exclude some, but not all, of the evidence upon which Dr. Maddox relies. If Dr. Maddox continues to hold the same opinion based on evidence that has not been excluded, then The Trial Court, in its discretion, can decide whether a 402 hearing is necessary regarding whether Dr. Maddox has sufficient independent foundation for his opinion.</p>
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		testing, to help inform their opinions in the present case.” (Id.) “‘As manufacturers of asbestos-containing talcum powders, Defendants predictably take issue with expert testimony and opinions regarding the contamination of their talc with asbestos. Defendants’ challenge to Dr. Maddox’s opinions is the proper subject of vigorous cross-examination, governed by Evidence Code sections 761, 767, 773 and 780, and not an evidentiary hearing under Evidence Code section 402.” (Id.)	
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No.	What to Exclude	Arguments	Ruling
30	Opinions and testimony by Plaintiffs’ expert Dr. Jacqueline Moline.	<p>Defendants contend:</p> <p>“Dr. Moline intends to tell the jury that plaintiff Carolyn Weirick (“Ms. Weirick”) was exposed to asbestos through her use of Johnson’s Baby Powder and Shower to Shower talcum powder (“Johnson’s talcum powder products”), and that this exposure was a substantial factor in causing her mesothelioma. However, Dr. Moline admitted that she does not know how much asbestos, if any, Ms. Weirick was allegedly exposed to from her use of Johnson’s Baby Powder or Shower to Shower. Thus, Dr. Moline’s causation opinion is wholly without basis and should be excluded.” (Motion, p. 1.)</p> <p>“Defendants anticipate that Dr. Moline may also attempt to tell the jury about the ~50 other plaintiffs in other asbestos litigation who she has concluded developed mesothelioma from exposure to cosmetic talc. Defendants have no information regarding these other plaintiffs, their medical and exposure histories, or their lawsuits (including their allegations of asbestos exposure). Such testimony is not only irrelevant but is highly prejudicial to Defendants and will only result in undue consumption of time and juror confusion.” (Id.; see also id. at pp. 3-4.)</p>	<p>Granted in part. Otherwise denied without prejudice:</p> <p>Defendants contend Dr. Moline should be excluded because she failed to quantify the dose Ms. Weirick inhaled.</p> <p>Plaintiff cites to <i>Davis v. Honeywell</i> (2012) 245 Cal. App.4th 477, which holds that the “every exposure” theory is a jury question. Such testimony may be admissible, but Dr. Moline cannot go further in arguing that Plaintiff was exposed to a specific quantifiable dose unless she has a basis for doing so. Apparently she does not.</p> <p>As with Motion in Limine 29</p>

		<p>Dr. Moline’s opinions lack foundation: “Dr. Moline agrees that asbestos-related mesothelioma is a dose-response disease. (Deposition of Dr. Moline (“Moline Dep.”), attached as Exhibit A to Stewart Decl., at 39:15-22.) According to Dr. Moline, only “nontrivial exposures to asbestos” should be considered a substantial factor in the development of mesothelioma. (Id. at 39:23-40:11, 44:22-45:11.) Dr. Moline explained that a “nontrivial exposure” is an exposure “orders of magnitude above background that are associated with increased risk of developing disease.” (Id. at 40:12-18.)” (Id. at pp. 1-2.)</p> <p>“Accordingly, by Dr. Moline’s own standard, Ms. Weirick would have to be exposed to a “nontrivial” level of asbestos “orders of magnitude above background” from her use of Johnson’s talcum powder products in order for Dr. Moline to consider the Johnson’s talcum powder products a substantial factor in the development of her mesothelioma. Yet, Dr. Moline admitted at deposition: [1] She has not done a dose calculation to determine how much asbestos Ms. Weirick may have been exposed to through her use of Johnson’s talcum powder products (id. at 224:21-225:5; 229:11-25.); [2] She has not calculated a cumulative asbestos fiber dose for Ms. Weirick from her use of Johnson’s talcum powder products (id. at 230:7-10); and [3] She has not done a quantitative analysis with respect to the amount of asbestos she believes Ms. Weirick may have been exposed to through her use of Johnson’s talcum powder products (id. at 227:23-228:4; 229:11-25.)” (Id. at pp. 1-2.)</p> <p>“Dr. Moline clearly has no idea how much asbestos, if any, Ms. Weirick was exposed to from her use of Johnson’s talcum powder products Thus, Dr. Moline has absolutely no basis— let alone a reasonable one— on which to opine that Ms. Weirick was exposed to a “nontrivial” amount of asbestos “orders of magnitude above</p>	<p>Plaintiffs and Dr. Moline must verify that she is able to testify to a reasonable degree of scientific certainty without reliance upon the evidence excluded by this Court. Plaintiffs state that there is enough evidence to establish exposure to asbestos through use of the product. The trial court can decide whether that is so.</p> <p>Dr. Molina’s testimony about asbestos fibers appears to be the subject of the same debate that is occurring between other expert witnesses. The Court is not prepared to take sides by excluding Plaintiffs’ evidence at this point.</p> <p>Dr. Molina’s testimony about the specifics of other asbestos cases is excluded.</p>
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		<p>background” from her use of Johnson’s talcum powder products. Dr. Moline likewise has zero basis on which to opine Ms. Weirick’s use of Johnson’s talcum powder products was a substantial factor in the development of her mesothelioma. Dr. Moline’s causation opinion is entirely lacking in foundation and purely speculative. Dr. Moline’s causation opinion is guesswork—not science. Accordingly, Dr. Moline’s causation opinion must be excluded pursuant to the standards set forth in Sargon.” (Id. at p. 2.)</p> <p>“In addition, Dr. Moline should not be allowed to rely on the binomial spreadsheet prepared by Plaintiffs’ statistical expert, Dr. Stokes, to opine about the probability of Ms. Weirick’s exposure. (Exh. A to Stewart Decl. (Moline Dep.), at 227:23-230:25.) Dr. Moline is not an expert in statistics. (Id. at 141:11-13.) All she did was review an affidavit of Dr. Stokes’ opinions. She never spoke to Dr. Stokes nor did she ever review Dr. Stokes’ deposition testimony. (Id. at 198:16-199:23.) She is also unqualified to conduct her own statistical probability analyses. (Id. at 141:11-13.) She should, therefore, be precluded from offering any opinion about the probability of Ms. Weirick being exposed to asbestos-contaminated talcum powder or the statistics underlying such an analysis.” (Id. at pp. 2-3.)</p> <p>Chanel contends:</p> <p>“Plaintiffs allege that Plaintiff Carolyn Weirick (“Weirick”) was diagnosed with mesothelioma, a cancer in the lining of her lung, after having allegedly breathed asbestos fibers through her use and general presence around talcum powder products allegedly contaminated with asbestos. As against Chanel, Plaintiffs allege that Chanel No. 5 After Bath Powder (“Chanel No. 5) has, at some point, been contaminated with asbestos, and that Weirick’s mother</p>	
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		<p>occasionally applied Chanel No. 5 in Weirick's presence, thereby potentially exposing Weirick to asbestos fibers." (Chanel Motion, p. 1.)</p> <p>"Dr. Moline is an Occupational Medicine Specialist, retained by Plaintiffs to offer opinions in this matter. It is anticipated the Dr. Moline will be offered at trial to opine that 1) Weirick's presence around her mother while she applied Chanel No. 5 resulted in exposure to asbestos, such that it was a substantial factor in causing Weirick's mesothelioma; 2) asbestos fibers shorter than 5 microns in length can be carcinogenic; and 3) nonasbestiform fibers can cause mesothelioma. However, Dr. Moline's opinions on these subjects are lacking in foundation and should be excluded:</p> <ul style="list-style-type: none"> • "Dr. Moline is not aware of any testing conducting on Chanel talcum powderproducts, does not know who supplied talc to Chanel, or which mines the talc in Chanel No. 5 was sourced from (other than through a representation made by Plaintiffs' counsel that Chanel used Italian talc). • "Dr. Moline's belief that asbestos fibers shorter than 5 microns in length can be carcinogenic is not a generally accepted opinion in the medical or scientific community and is based on a study merely identifying asbestos fibers in the pleura; importantly, the presence of asbestos fibers only identify exposure to asbestos – which everyone experiences through background levels of asbestos – not causation. • "The basis for Dr. Moline's opinion as to nonasbestiform fibers potentially causing mesothelioma is irrelevant, unsubstantiated, and unreliable." (Id. at pp. 1-2.) <p>Plaintiffs contend:</p>	
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		<p>“Defendant’s move to preclude Dr. Moline from opining that Mrs. Weirick’s exposure to Johnson’s Baby Powder, Shower to Shower and Chanel No. 5 After Bath Powder caused or contributed to her disease. At the outset it must be brought to the Court’s attention that Dr. Moline’s opinions regarding these issues have never been excluded or limited by any Court to Plaintiffs’ knowledge. She has testified for many years, across the country, and despite having motions such as the ones filed here, filed in many cases, they have not, to plaintiffs’ knowledge been granted. If Dr. Moline’s opinions had been excluded in the past Defendants would have attached said orders to their motions. Notably Dr. Moline testified in several recent cases involving Johnson’s Baby Powder exposure including the Stephen Lanzo case in New Jersey, the Joanne Anderson case here in Los Angeles, and in the Ilene Brick case here in Los Angeles. Dr. Moline’s opinions in this case are not new or novel, or unusual in any way, but are consistent is testimony that has been admitted all over the country for many years.” (Opposition, p. 2.)</p> <p>“Specifically addressing Defendants’ motions, talc-containing Johnson’s Baby Powder and Shower to Shower powder contains asbestos and has for decades. Chanel has also sold asbestos-containing Chanel No. 5 After Bath Powder for decades. The evidence to be presented at this trial, in the form of expert testimony, historical testing results, internal Johnson & Johnson documents, testing of ore sources, and corporate representative testimony, will overwhelmingly establish the fact that Johnson’s Baby Powder, Shower to Shower, and Chanel No. 5 After Bath Powder contained asbestos for decades.” (Id.)</p> <p>“In light of the clear evidence of asbestos content in Defendants’ products, Dr. Moline holds the opinion that Mrs. Weirick’s decades-long use of Johnson & Johnson baby powder and Shower</p>	
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		<p>to Shower exposed her to significant amounts of asbestos and substantially contributed to cause her mesothelioma. Dr. Moline also holds the opinion that Mrs. Weirick's mother's use of Chanel No. 5 After Bath Powder, also caused Mrs. Weirick be exposed to significant amounts of asbestos and substantially contributed to cause her mesothelioma." (Id.)</p> <p>Dr. Moline relied on reliable materials – Dr. Longo's report, Dr. Compton's report, Dr. Stokes's statistical analysis, Dr. Alice Blount's work, corporate documents, historical tests, etc. (See id. at pp. 4-10.)</p> <p>Dr. Molines is not required to identify a numerical dose of exposure: "Defendants seem to be arguing that Dr. Moline has testified that in order to reach a causation opinion she must first (a) perform a dose calculation to determine how much asbestos Ms. Weirick may have been exposed to (b) calculate a cumulative asbestos fiber dose for Mrs. Weirick for her use of Johnson's talcum products, and finally (c) a quantitative analysis with respect to the amount of asbestos she believes Mrs. Weirick may have been exposed to through her use of Johnson's talcum powder products. No case, and no testimony by Dr. Moline, supports this conclusion. In fact, the court in Davis v. Honeywell, 245 Cal. App. 4th 477 (2012), held that California law does not require any quantification of dose in order to establish causation in a mesothelioma case." (Id. at p. 10.)</p> <p>Dr. Moline should be allowed to testify about other mesothelioma plaintiffs: "The issues raised by Defendants in their Motion fall squarely within the realm of vigorous cross-examination, not a 402 hearing. They go to the weight and credibility of evidence (matters for the jury's consideration), rather than admissibility or sufficiency." (Id. at p. 13.) "Specifically, the argument that Dr.</p>	
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		<p>Moline's examination of ~50 other people diagnosed with mesothelioma for which talcum powder was a cause cannot be excluded simply because those individuals had legal cases. There is no justification for such a position; no legal basis to exclude this information that Dr. Moline properly relies upon to help inform her opinion in this case. Medical experts routinely rely on their experience and training when giving testimony in front of a jury. It is not at all unusual or out of the norm for a Medical expert to rely on other patients or cases they have seen and evaluated (whether in litigation or not) to help inform their opinions in the present case. As a manufacturer asbestos-containing talcum powder, the Defendants predictably take issue with expert testimony and opinions regarding the contamination of their talc with asbestos. Defendants' challenge to Dr. Moline's opinions is the proper subject of vigorous cross-examination, governed by Evidence Code sections 761, 767, 773 and 780, and not an evidentiary hearing under Evidence Code section 402." (Id.)</p> <p>Dr. Moline has foundation to opine concerning the asbestos content of Chanel No. 5 After Bath Powder. (See id. at pp. 13-16.)</p> <p>Dr. Moline should be allowed to testify regarding asbestos fibers shorter than five microns and the distinction between asbestiform and non-asbestiform. (See id. at pp. 16-19.)</p>	
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Exhibit 26

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The Analysis of Johnson & Johnson's Historical Product Containers and Imerys' Historical Railroad Car Samples from the 1960's to the Early 2000's for Amphibole Asbestos

2nd Supplemental Report



Anthophyllite Bundle 1967

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The Analysis of Johnson & Johnson's Historical Product Containers and Imerys' Historical Railroad Car Samples from the 1960's to the Early 2000's for Amphibole Asbestos

Supplemental Report

This supplemental report contains the following new information obtained by MAS:

1. In the previous reports, Lee Poye STS samples 20180061-31F (STS 065) and 20180061-31G (STS 065) was assumed to be two samples from the same J&J container STS 065. This assumption was based on that both samples had the same J&J container I.D. of STS 065. Recently we examined container photographs of STS 065 and discovered that the J&J I.D. STS 065 was for two containers in a single package. The 31F sample is for a white STS "Regular" container and for sample 31G, "peach color" STS container that has a "SPICE" label at the top of the container. This new information changed the total number of containers/samples analyzed from 71 to 72 and the total positive samples from 49 to 50. This report was corrected to reflect this information.
2. Correct typographical errors and editing for clarification.
3. This 2nd Supplement Report does not contain any new analytical data.

Overview

Historical J&J Containers

This 2nd supplemental report describes the procedures and methodology used by both MAS and J³ Resources Inc. to analyze 72 separate historical containers and samples of Johnson & Johnson's (J&J) Baby Powder (JBP), Shower to Shower (STS) and Imerys' railroad car cosmetic talcum powder for the possible presence of amphibole asbestos. The J&J and Imerys' containers and samples analyzed for this report were all supplied by both J&J and Imerys from their historical inventory.

The 72 J&J and Imerys-supplied historical cosmetic talcum powder containers/samples analyzed for this report, were chosen from the 1960's, 1970's, 1980's, 1990's and early 2000's.

The 72 product sample set consisted of 57 JBP (with Asian)/STS containers, and 15 historical Imerys' samples that were described as "railroad car" samples. The source of the talcum powder for these historical JBP/STS and Imerys containers/samples came from both the Italian

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(1960's, JBP/STS and Vermont (1960's, 1970's, 1980's, 1990's, early 2000) talc mines. Included in this report are seven Asian Historical JBP samples that MAS analyzed from possibly only the 1980's. The source of the talc that J&J used for these historical Asian samples was from the Dongyang talc mine in Korea.

Of the 57 Historical JBP/STS containers reported here, 34 were JBP (with Asian) and 23 were STS.

Historical Imerys Samples

The additional 15 historical Imerys-supplied railroad car samples incorporated into this supplemental report were chosen from 1989, the 1990's and the early 2000's.

The addition of 15 Imerys' samples brings the total number of both historical containers (JBP/STS) and historical samples (Imerys) that MAS has now analyzed for the MDL to 72. This is in addition to the 35 JBP/STS containers (March 11, 2018 Supplemental Report) that were supplied by both plaintiffs' counsel and MAS.

This now would bring the total number of J&J/Imerys cosmetic talcum powder samples analyzed by MAS to 107.

J³ and MAS' Analysis of Historical STS Samples

Of the 57 historical JBP/STS talcum powder containers that were analyzed and reported here, 41 JBP (with Asian)/STS containers were analyzed by MAS and 16 STS containers (MAS verified by ATEM & PLM) were previously analyzed by Lee Poye of J³ Resources Inc., located in Houston, Texas.

For the Lee Poye ATEM analysis, initially MAS was unable to verify the results of two J³ ATEM STS sample analyses (20180061-63D and 20180061-10D). Both of these samples were reported to contain one asbestos anthophyllite structure in each. These two STS samples were not reported in our November 11, 2018 Supplemental Report since we could not verify if they were either positive or negative for amphibole asbestos.

Since the November 11, 2018 report, MAS has received the 16 STS samples (16 containers) from Lee Poye and has analyzed all of these samples by the PLM/Blount method. The two STS samples (20180061-63D and 20180061-10D) that MAS could not verify by ATEM, were positive for regulated amphibole by the Blount/PLM method.

The two STS containers positive for amphibole asbestos are now included into this supplemental report. Our November 11, 2018 expert report provided analysis of 55 historical J&J product containers, and with the addition of these two now verified (Lee Poye STS product

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containers 20180061-63D and 20180061-10D), this 2nd supplemental report is now providing the analytical results for 57 historical JBP/STS containers.

Also, when MAS analyzed five J³ ATEM non-detect STS samples by the Blount/PLM method, four of these five J³ ATEM non-detects were found to be positive for amphibole asbestos by the Blount/PLM method. The one remaining ATEM non-detect J³ STS sample (20180061-02D), was also found to be a non-detect for asbestos by the PLM/Blount method.

As described in our November 11, 2018 report, MAS sent a number of the historical J&J samples to J³ Resources for both PLM and XRD analysis using the ISO 22262-1 and ISO 22262-3 protocols. For this supplemental report, 19 additional historical J&J samples (18 containers) (M69042, M69248 and M68233) were sent to Lee Poye for XRD analysis using the ISO 22262-3 method.

Cosmetic Talc Analytical Methods

The three principle analytical methods used by both J³ and MAS for the analysis of the 57 J&J cosmetic talc containers were X-ray diffraction (XRD), polarized light microscopy (PLM) and analytical transmission electron microscopy (ATEM). For the 15 individual historical Imerys' railroad car samples, were only analyzed by the PLM (ISO & Blount) and ATEM methods. The Imerys' railroad car samples were not analyzed by XRD. The reasons for this will be discussed later in this report.

The three analytical methods used in this report all have strengths and weaknesses where it is expected, that amount of amphibole asbestos content would be at or below 0.1 wt. %.

XRD

For cosmetic talc the XRD has the advantage of analyzing very large samples as compared to either PLM or ATEM. The disadvantages are 1) poor analytical sensitivity for bulk cosmetic talc samples when the potential amphibole asbestos concentration is typically below 0.1 to 0.3 weight % (wt.%), and 2) XRD cannot determine the crystalline habit (fibrous vs. non-fibrous) of amphibole minerals. However, for the majority these samples, XRD (ISO 22263-3) was used so that a comparison of the results to both PLM and ATEM analysis could be made in this report.

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PLM

The PLM method is primarily used today for the analysis of asbestos-added products where the asbestos-content of these products are typically over 1 % by weight.^{1,2,3}

The strengths of the method are that it can positively identify the different regulated asbestos mineral types and provide a qualitative estimate of the weight percent of asbestos. The primary weaknesses of the method are 1) analytical sensitivity issues for samples that may contain less than 0.1 wt. % of asbestos such as cosmetic talcs and 2) because asbestos fiber and bundle structure resolution in the PLM method is dependent on the wave length of light, asbestos particles must be at least 0.5 μm in the smallest dimension to be visible. Interesting enough, Dr. Walter McCrone stated: *"I have never seen rolled talc plates as fibers"* page 44, 3rd paragraph. For these analysis the ISO 22262-1 PLM method was used.

ATEM

It is well recognized that the use of an analytical transmission electron microscope (ATEM) is the only analytical method with the appropriate sensitivity for the analysis of trace mineral concentrations that can be much less than 0.01 wt. %.

ATEM Strengths are: 1) it can positively identify potential fibrous chrysotile and amphibole asbestos structures by energy dispersive X-ray analysis (EDXA) for mineral fiber chemistry and crystalline structure information by selective area electron diffraction (SAED) and 2) The ATEM provides good morphology information that can, in most cases, distinguish between single fibers and bundles of regulated asbestos fibers.

The primary weakness for ATEM analyses of amphibole asbestos in cosmetic talcs is the sample preparation where overloading issues with the talc particles affects the analytical sensitivity of typical ATEM sample preparation procedures. Increasing analytical sensitivity usually involves the examination of hundreds of TEM grid openings and requires significant hours of TEM instrumentation time. Also, the ATEM is typically biased against detecting very large asbestos bundles that are routinely found by PLM.

¹ ISO 22262-1: 2012E Air Quality Bulk Materials Part 1: Sampling and Qualitative Determination of Asbestos in Commercial Bulk Samples.

² The Asbestos Particle Atlas, Dr. Walter C. McCrone, Director McCrone Research Institute, Ann Arbor Science, 1980.

³ EPA/600/R-93/116.

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Heavy Liquid Separation: PLM and ATEM Method

The concern over analytical sensitivity for amphibole asbestos in cosmetic grade talc was first published in the peer-reviewed literature by A. M. Blount.^{4,5} It was estimated by Dr. Blount that for every 1,000 amphibole particles present there would be approximately 1,000,000 talc particles. To overcome this problem the author described the use of a heavy liquid density separation method that reduced the number of talc particles as compared to the potential presence of amphibole asbestos thereby increasing analytical sensitivity for the PLM analysis of the talc samples.

In addition to increasing the analytical sensitivity of the PLM analysis for cosmetic grade talc using the heavy liquid separation method as published by Blount, the heavy liquid separation method can also be used to substantially increase the analytical sensitivity of the ATEM analysis of cosmetic talc samples as described in the ISO 22262-2 bulk materials method.⁶

Reducing the amount of talc increases the sensitivity of the ATEM analysis and it also increases the amphibole sensitivity by the ATEM method. It would also increase the efficiency of the analyst by eliminating the need to examine hundreds of TEM grid openings to achieve reasonable analytical sensitivity.

References for the use of heavy liquid density separation of cosmetic talc during the sample preparation stage was described first by Dr. Fred Pooley in 1971, the Colorado School of Mines Research Institute in 1973 and by Windsor Minerals, Inc., Dartmouth College in 1974.^{7, 8, 9}

⁴ A.M. Blount "Amphibole Content of Cosmetic and Pharmaceutical Talcs", Environ. Health Perspectives, Vol. 94, 1991, pp. 225-230.

⁵ Process Mineralogy IX: The Minerals, Metals and Materials Society, 1990, A.M. Blount "Detection and Quantification of Asbestos and Other Trace Minerals in Powdered Industrial-Mineral Samples", pp. 557-570.

⁶ ISO 22262-2: 2014E Air Quality-Bulk Materials Part 2: Quantitative Determination of Asbestos by Gravimetric and Microscopical Methods.

⁷ March, 1974: to Windsor Minerals, Inc., Windsor, Vermont from R.C. Reynolds, Jr., Department of Earth Sciences, Dartmouth College, Hanover, New Hampshire: "Analysis of Talc Products and Ores for Asbestiform Amphiboles".

⁸ Research and Engineering Center, August 11, 1971 Memo to File. FDA Meeting-Asbestos in Cosmetic Talc, August 3, 1971-Washington, D.C.

⁹ Colorado School of Mines Research Institute "A Procedure to Examine Talc for the Presence of Chrysotile and Tremolite-Actinolite Fibers".

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Over All Summary of Results

J&J and Imerys

The 57 JBP/STS containers (including the 7 historical Asian JBP containers) and the 15 individual Imerys' railroad car samples gives a total of 72 historical containers/samples that were incorporated into this supplemental report.

A summary of these results are as follows;

1. The analysis of 34 historical JBP (with Asian) containers found that 24 were positive or 71 % positive.
2. The analysis of 23 historical STS containers found that 18 were positive or 78 % positive.
3. The analysis of 15 individual Imerys' railroad car samples found that 8 were positive or 53 % positive.

Excluding the seven JBP Asian historical containers would then give a total of 65 JBP/STS & Imerys' containers/railroad car samples analyzed; 44 were positive (68 %) for amphibole asbestos.

A summary of the results excluding the Asian JBP containers:

1. 27 historical JBP container analyses; 18 were positive or 67 % positive.
2. 23 historical STS container analyses; 18 were positive or 78 % positive.
3. 15 individual Imerys' railroad car samples; 8 were positive or 53 % positive.

XRD

All 50 JBP/STS (Italian and Vermont talc mine source) talcum powder samples analyzed by XRD were found to be negative or non-detect by this method. Of the seven Asian JBP containers analyzed, two were positive and one sample was inconclusive. The 15 Imerys' railroad car samples were not analyzed XRD.

PLM

When 56 of the JBP/STS containers and Imerys samples were analyzed by MAS using PLM (ISO 22262-1) method (no heavy liquid density separation), 18 of the samples were positive for regulated amphibole asbestos or 32 % positive.

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The Blount/PLM heavy density method found that out of the 72 JBP/STS and Imerys' containers/samples analyzed, 41 or 57 %, were positive for regulated amphibole asbestos.

For the ISO PLM method the amount of asbestos found for the positive samples were all <0.1 %. The Blount PLM method the amount of asbestos found ranged from <0.1 % to 0.7 %.

ATEM

The ISO 22262-2 ATEM (MAS and Lee Poye verified) analysis showed that in 70 JBP (With Asian)/STS and Imerys' railroad car talcum powder samples, 42 or 60 %, contained detectable amounts of amphibole asbestos fibers and bundles (tremolite solid solution series and or anthophyllite solid solution series). Neither chrysotile nor anthophyllite without iron was detected in any of the ATEM samples.

By ATEM, the amphibole asbestos concentration for the 42 positive JBP/STS and Imerys talcum powder samples ranged from between 4,370 fibers-bundles/gram to 268,000 fibers-bundles/gram of talcum powder.

All of analysis (PLM, Blount/PLM and ATEM), 50 (69 %) of the 72 container/samples were positive for regulated amphibole asbestos.

Two different regulated amphibole asbestos types were found. These were the tremolite asbestos solid solution series amphiboles which includes tremolite, winchite, richterite, and actinolite (only tremolite was detected by ATEM) and the anthophyllite asbestos solid solution series that includes anthophyllite, iron-rich anthophyllite, ferro-anthophyllite, cummingtonite and grunerite. Only iron-rich anthophyllite solid solution series asbestos structures were detected.

As expected, no anthophyllite asbestos (without iron) or chrysotile fibers/bundles were found in any of the 42 positive J&J talcum powder samples we analyzed by ATEM. A more detailed explanation for the lack of anthophyllite (without) iron or chrysotile fiber findings can be found in the Discussion and Conclusion Section of this report.

Fibrous Talc MAS Analysis

In addition to tremolite series and anthophyllite series amphibole asbestos, 42 of the 57 JBP (with Asian)/STS and Imerys' talcum powder samples analyzed by ATEM were observed to contain fibrous talc. A semi-quantitative calculation for the amount fibrous talc for each of the positive ATEM samples was also done. The concentration for each of the fiber talc positive ATEM samples ranged from 290,000 talc fibers per gram to 1,020,000 talc fibers per gram of product.

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The 16 J³ ATEM container analysis did not provide enough information to perform a semi-quantitative fibrous talc calculation, and therefore, was reported as not applicable (NA).

The ISO 22262-1 PLM method found that for the 56 Italian, Vermont and China sourced talc containers/samples analyzed by MAS, 55 (98 %) contained fibrous talc. The Blount/PLM method showed that of 72 analyzed, 20 (28 %) contained fibrous talc.

Materials and Methods

Sample Log-In Procedure

The JBP/STS and Imerys' talcum powder samples that were analyzed by MAS for this report were provided by both Johnson & Johnson and Imerys from their historical sample depository. The J&J historical samples were received by MAS in four separate sets and logged into MAS' sample tracking system and assigned to MAS project numbers as follows; **M68233**, two samples received at MAS on February 9, 2018. **M68503**, 75 samples received at MAS on March 29, 2018. **M69042**, 10 samples received at MAS on July 17, 2018 and **M69248**, seven Asian samples received at MAS on August 21, 2018. The Imerys historical samples were received by MAS in two separate sets and logged into MAS' sample tracking system and were assigned MAS project numbers as follows; **M69751**, 43 samples received at MAS on 12/7/2018 and **M69757**, 37 samples were received at MAS on 12/10/2018.

ISO-22262-1 and 3 PLM/XRD (J³ Resources)

On June 1, 2018, 75 J&J sample splits from M68503 and four spiked samples (tremolite and anthophyllite asbestos) were sent to Lee Poye for PLM and XRD analysis by ISO 22262-1 and 3.

On November 28, 2018, 10 sample splits from M69042, seven sample splits from M69248 (Asian JBP Containers), and four spiked samples (tremolite and anthophyllite asbestos) were sent to Lee Poye for XRD analysis by ISO 22262-3. The results were provided to MAS from J³ in a December 12, 2018 report and the data was added to this supplemental report.

On December 12, 2018, two sample splits from project M68233 were sent to Lee Poye for XRD analysis.

The results were provided to MAS from J³ in a December 20, 2018 report and the data was added to this supplemental report.

Muffle Furnace

Approximately 1 to 2 grams (Sartorius Research Balance) of the 72 talcum powder samples was removed from each of the JBP/STS containers and Imerys samples and placed in a 15 ml glass

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scintillation vials. The scintillation vials were then placed in a Fisher Scientific Iso-temp muffle furnace Model #650 at 400°F for a minimum of 4 hours to remove any organic material.

ISO-22262-1 PLM (MAS)

Approximately 60 to 100 milligrams each of the 56 talcum powder samples were analyzed by the ISO 22262-1 PLM method. Three mounts of the talcum powder sample are placed on two glass slides, a drop of the 1.605 refractive index fluid was placed onto each of the three talcum powder mounts, stirred with the point of a scalpel blade, and then covered with an 18 x 18 mm glass cover slip. The entire area of the three coverslip mounts were examined (972 mm²). Positive identification of amphibole asbestos was done by morphology, refractive indices, elongation, angle of extinction, and birefringence. For positive samples, a visual estimation of the quantity of asbestos observed was based on eye calibration through review of lab generated weight percent standards. Visual calibration was augmented by the use of area percent charts.

PLM/Blount Method

Approximately 60 to 100 mg (Sartorius Research Balance) from each of the 72 JBP/STS and Imerys' muffled talcum powder sample aliquots were placed into individual labeled Eppendorf micro-centrifuge tubes (MCT) (Premium 1.5mL MCT Graduated Tubes Cat. No. 05-408-12).

Density Separation

Approximately 1.2 ml of Heavy Liquid (Lithium heteropolytungstates solution, GeoLiquids, Inc., Cat. No. LST010 with a stated density 2.85 g/cc diluted with distilled water to a density of 2.810 (determined by a VWR Hydrometer model number 34620-1109) was added to the MCT containing the 100 mg of the JBP/STS and Imerys' talcum powder samples and mixed with a disposable mixing rod for 10 to 20 seconds. The combined talc and LST heavy liquid (density 2.810 grams/cc) samples were placed into a vacuum desiccator (JEOL EMDSC-U10A) to remove air bubbles for 3 minutes at a pressure of approximately 8 Torr prior to centrifugation.

The MCT sample tubes were then placed in an Eppendorf micro-centrifuge (Model No. 5415D) set at 7,000 RPM for a total of 10 minutes at room temperature. After removal of the MCT tubes from the centrifuge, the talc/heavy liquid was pipetted off from the top of the centrifuge tube, distilled water was added, mixed and the sample was re-centrifuged as described above. This step was repeated two more times. After the third centrifugation/heavy liquid removal step, the heavy particles were removed from the bottom of the centrifuge tube with a pipette with several drops of water containing the heavy particles then transferred to a glass

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microscope slide and allowed to dry. The heavy particle residue on the glass slide was then analyzed by the ISO 22262-01 PLM method.

ATEM-ISO 22262-2 TEM Sample Preparation

Density Separation

Approximately 20 to 60 mg (Sartorius Research Balance) from the muffled talc sample aliquot was placed into a labeled Eppendorf micro-centrifuge tube (MCT) (Premium 1.5mL MCT Graduated Tubes Cat. No. 05-408-12). Approximately 1.2 ml of Heavy Liquid (Lithium heteropolytungstates solution, GeoLiquids, Inc., Cat. No. LST010 density 2.85 g/cc) was added to the MCT containing the talc samples prepped and mixed with a disposable mixing rod for approximately 10 to 20 seconds. The combined talc and LST heavy liquid samples were then placed into a vacuum desiccator (JEOL EMDSC-U10A) to remove air bubbles for 15 minutes at a vacuum pressure of approximately 8 Torr prior to centrifugation.

The MCT sample tubes were then placed in an Eppendorf micro-centrifuge (Model No. 5415D) set at 9,000 RPM for total of 90 minutes at room temperature. After removal of the MCT tubes from the centrifuge, they were flash frozen in liquid nitrogen and the MCT tip was immediately removed with a pre-cleaned 6 inch steel cleaver into a clean 45 mL flat bottom disposable centrifuge tube. Figure 1 shows the cut area on the MCT tip.

Figure 1:

Cut Line for Removal of MCT Tip



Red line is showing cut area on MCT tip

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Deionized water was added to the centrifuge tube to bring the volume to approximately 45 ml. The 45 ml centrifuge tube was capped and inverted by hand 5 times to distribute the collected material in the bottom of the MCT tip. The 45 ml mixture was then immediately and continuously filtered onto a 25 mm Polycarbonate filter (PC) with a 22 μ m pore size. After the mixture was filtered, the excess heavy liquid was washed through the filter with the addition of approximately 100 ml of deionized water. The prepared PC filter was placed in a new disposable plastic 47mm petri dish and allowed to dry at ambient room temperature in a HEPA hood for a minimum of 2 hours. The processed PC filter samples were directly prepared onto TEM 100 μ m size grids (2 for analysis and 1 for archive) using either the standard TEM filter preparation protocol for MCE filters or for the PC filters.^{10, 11, 12, 13, 14, 13, 14}

ATEM Amphibole Analysis Procedure

JEOL 1200EX ATEMs equipped with either a Noran or an Advanced Analysis Technologies (light element) energy dispersive x-ray analyzer (EDXA) were employed for this analysis. ATEM samples were analyzed at a screen magnification of 20,000X. Amphibole fibers or bundles with substantially parallel sides and an aspect ratio of 5:1 or greater, and at least 0.5 μ m in length were counted as regulated asbestos fibers and bundles per standard TEM counting rules as described by ASTM D5755, ASTM D5756, ISO 10312, ISO 13794, AHERA (TEM section only) and D7712-11.^{10,11,12,13,14,15}

Positive identification of amphibole asbestos requires EDXA for mineral chemistry confirmation and selected area electron diffraction (SAED) for each amphibole type. At times, amphibole bundles may have a diameter that is too thick to acquire a SAED pattern, then, only the mineral chemistry can be used. For anthophyllite series asbestos, two separate angle SAED were acquired.

¹⁰ D5755-09 "Standard Test Method for Microvacuum Sampling and Indirect Analysis of Dust by Transmission Electron Microscopy for Asbestos Structure Loading.

¹¹ D5756-02 "Standard Test Method for Microvacuum Sampling and Indirect Analysis of Dust Loading by Transmission Electron Microscopy for Asbestos Mass Surface.

¹² ISO 10312 1995-05-01, "Ambient Air Determination of Asbestos Fibers-Direct-Transfer Transmission Electron Microscopy Method.

¹³ ISO 13794 1999 07-15, "Ambient Air-Determination of Asbestos Fibres-Indirect-Transfer Transmission Electron Microscopy Method.

¹⁴ U.S. Environmental Protection Agency (USEPA) 1987. Asbestos Hazard Emergency Response Act, 40 CFR Part 763, Appendix A to Subpart E, USEPA, Washington D.C.

¹⁵ D7712-11 "Standard Terminology for Sampling and Analysis of Asbestos."

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Counting Rules

100 grid openings were analyzed for each of the JBP/STS and Imerys talcum powder samples. The 100 grid opening counts were split evenly between two grids.

All amphibole fibers/bundles that meet the above-stated size criteria were recorded on the MAS TEM structure count bench sheets for each sample. Length and width of each amphibole fiber/bundle was recorded and identified. Every amphibole structure identified and counted by the analyst required observation of an EDXA spectra matching the mineral chemistry for that particular amphibole and a SAED amphibole pattern. EDXA spectra and SAED patterns are recorded/saved for every asbestos amphibole structure found in the samples.

Photomicrographs were taken of the amphibole fibers/bundles found from each of the samples that were positive for amphibole asbestos.

Results were reported as either amphibole asbestos fibers/bundles (structures) per gram of talc or in weight percent. Analytical sensitivity/detection limits were reported as structures per gram. The weight percent analytical sensitivity/detection limit was not provided in the November 11, 2018, since the procedure for calculating the detection limit is to use a theoretical mathematical calculation of one arbitrary minimal fiber dimension. Instead of an arbitrary fiber dimension, a more accurate represented fiber size would be to use an average size for all the of detected amphibole fibers structures analyzed by ATEM in these samples. The average amphibole asbestos structure size was 12.1 μm x 1.1 μm , with an aspect ratio of 11:1. For this report, the more accurate weight detection limit was added to the data sets.

Fibrous Talc Estimation

A number of the JBP (with Asian)/STS and Imerys talcum powder samples were found to contain fibrous talc during both types of the PLM analysis as well as the ATEM analysis. A full quantitative analysis of the number of fibrous (asbestiform) talc particles was not done at this time. For the ATEM, a semi-quantitative estimate of the number of fibrous talc particles present in four random grid openings and observed throughout the 100 grid openings was scored as follows:

- 1) Abundant : (>11 fibrous talc particles)
- 2) Common: (4 to 10 fibrous talc particles)
- 3) Trace: (1 to 3 fibrous talc particles)

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This estimation was based on the talc fibers/bundles having at least a 5:1 aspect ratio or greater, at least 0.5µm in length and substantially parallel sides. One representative talc fiber or bundle was recorded (EDXA, SAED and photographed) for each of the samples that contained fibrous talc. Also, the finding of fibrous talc on random grid openings provided an overall estimate of how many talc fibers were on 100 grid openings analyzed for each of the samples.

For both PLM methods a visual estimation was made of the identified talc fibers and was reported as either trace or moderate (common).

Process Laboratory Blanks

For each set of samples that were prepared by the heavy liquid method, one process laboratory blank was prepared with each set of samples. These process blank MCE filters were prepared in the same exact manner as the talc samples (heavy liquid, filtration on MCE/PC filters, etc.) but without any talc material. For the TEM analysis, 100 grid openings were analyzed for each of the process blanks per sample set.

Results

J³ RESOURCES INC. ANALYSIS

XRD ISO 22262-3 Method

J³ Analysis

Lee Poye of J³ Resources analyzed 57 JBP/STS containers by the ISO 22262-3 XRD method. Of the 57 JBP/STS containers analyzed, 54 were non-detects, two were positive, and one was inconclusive by the XRD method.

For 50 JBP/STS containers where the source of the talc was either the Italian or Vermont mines, all were non-detects by XRD. The other seven were Asian historical JBP containers (the source of the talc was from the Korea mine) had two positive and one inconclusive and the other four samples were non-detects. The 15 Imerys railroad car samples were not analyzed by XRD.

A summary of all the XRD results are shown in Tables 7 & 8 to this report.

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PLM ISO 22262-1 Method

J³ Analysis

Using the ISO 22262-1 PLM method, J³ Resources found that out of 38 samples analyzed, all were negative or non-detects. A summary of the J³ results are also shown in Table 8 in this report.

ATEM of Historical J&J Vermont Talc Shower to Shower Talcum Powder

On July 18, 2018 Lee Poye of J³ Resources, Inc. issued a report (to Joe Satterley of the Kazan Law Firm) of his analysis of 16 historical J&J Vermont talc Shower to Shower talcum powder samples that were split by J&J from their historical Shower to Shower (STS) containers that ranged in date from 1978 to 1986.¹⁶

Of the 16 STS containers analyzed by Lee Poye using the ISO 22262-2 heavy liquid TEM method, 11 of the 16 samples (69%) were positive for anthophyllite asbestos (solid solution series) and five samples were below the detection limit of the method. A summary of the 11 positive results are shown in Table 1.

Table 1

J³ TEM Results for Positive Vermont Talc Shower to Shower Samples

Laboratory Control Number	J&J Sample Identification Number	STS Container Year	Mass Fraction Percent Wt.	Anthophyllite Asbestos (f/b) Concentration per g
20180070-07D	2014.001.0397	1978	7.3×10^{-4}	82,370
20180061-37D	STS001	1982	3.0×10^{-5}	9,257
20180061-38D	STS002	1980	3.0×10^{-3}	53,416
20180061-45D	STS009	1982	1.9×10^{-3}	9,000
20180061-52D	STS016	1980 - 1981	4.0×10^{-3}	70,126
20180061-63D	STS027	1980	3.5×10^{-5}	7,419
20180061-65D	STS029	1980 - 1981	9.2×10^{-3}	95,321
20180061-10D	STS044	1980 - 1981	2.6×10^{-5}	12,209
20180061-15D	STS049	1978	1.3×10^{-3}	60,507
20180061-31F	STS065	1986	2.9×10^{-3}	21,964
20180061-31G	STS065	1986	5.2×10^{-4}	29,715

¹⁶ J3 Report for the Analysis of Shower to Shower Talc Samples, July 18, 2018.

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The above results were reported by J³ as a mass fraction or weight percent. The calculations to the corresponding anthophyllite fiber/bundle concentrations per gram was done by MAS using the information provided on the J³ TEM count sheets.

Verification of Lee Poye's STS Results

Lee Poye arrived at MAS on the morning of October 31, 2018 with one TEM grid box that contained the prepared TEM grids for J³ project number JHI898969 for the J&J Vermont Talc STS samples. This information was confirmed by Lee Poye, that the TEM grids he brought to MAS was for the historical STS samples that he had previously analyzed.

In turn, MAS provided Mr. Poye with MAS TEM grid boxes for the 10 historical JBP talcum powder samples (MAS M69042). The MAS verification of the J³ analysis was only for the 11 positive TEM sample analysis, the five sample results that were below the detection limit were not verified by MAS, and those results were accepted as true by MAS.

MAS was able to verify nine of the 11 ATEM positive historical STS talcum powder samples reported by J³. The nine positive MAS verified STS ATEM samples, two non-verified STS positive ATEM samples, and the five samples that were below the ATEM detection limit, were included in this overall report and are identified in summary Tables 3 and 4.

A full report of the MAS verification analysis, verified count sheets, asbestos structure photomicrographs, EDXA and SAED data is provided with this report.¹⁷

The overall summary of the results for the three analytical methods used for the 57 JBP/STS containers and 15 Imerys' historical railroad car samples analyzed for this report are summarized in Tables 2, 3, 4, 5, 6, 7, 8 and 9. These summary tables have been organized by decade from the 1960's (Table 2), 1970's (Table 3), 1980's (Table 4), 1990's (Table 5) early 2000's, (Table 6), Asian (Table 7, XRD only), XRD and PLM (Table 8), and Fibrous (Table 9).

ISO-22262-1 Analysis

The ISO 22262-1 PLM analysis showed that out of the 72 JBP (with Asian)/STS containers and 15 Imerys' railroad car samples analyzed by MAS and J³, 18 containers (25%) had detectable amounts of regulated amphibole asbestos, the rest were either non-detects or contained actinolite/tremolite cleavage fragments that had an aspect ratio of < 3:1.

Results for all 18 positive samples were found to contain <0.1 % asbestos. Also, for these positive ISO PLM samples, both regulated actinolite/tremolite and or anthophyllite asbestos were found.

¹⁷ Verification of Lee Poye's TEM Analysis of J&J's Historical Vermont Talc-Containing Shower to Shower Talcum Powder Samples, November 5, 2018.

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A summary of the MAS & J³ ISO 22262-1 PLM analysis results are shown in Tables 2, 3, 4, 5 and 6 in this report.

Comparison of the J³ ISO PLM to MAS ISO PLM Analysis for the Same Sample Set

Both MAS and J³ analyzed the same 22 J&J/STS talc samples by the ISO22262-1 PLM method. Where all 22 of the J³ ISO PLM results were found to be negative, MAS found that 8 of the 21 were positive. A summary of this data is shown in Table 8.

PLM/Blount Method

The Blount/PLM method showed that out of the 72 historical JBP (with Asian)/STS containers and Imerys' railroad car samples analyzed by MAS, 41 (57%) had detectable amounts of regulated amphibole asbestos and the rest were either non-detects or contained only tremolite/actinolite cleavage fragments that had an aspect ratio that was less than 3:1.

These 72 historical containers/samples analysis by the Blount/PLM also includes the 16 Lee Poye historical STS containers that were sent to MAS from J³ on Nov 14, 2018 and received at MAS on Nov 16, 2018.

Results for 41 positive samples were reported as an estimated weight percent range of from < 0.1% to 0.7 %. Also, for these positive Blount/PLM samples, both regulated actinolite/tremolite and or anthophyllite asbestos was detected.

The summary of the MAS Blount/PLM results are shown in Tables 2, 3, 4, 5, and 6 in this report.

ATEM ISO 22262-2 Method

The ISO 22262-2 ATEM heavy liquid separation method showed that out of the 70 historical JBP/STS containers and Imerys' railroad cars samples, 42 (60 %) contained regulated asbestos fibers and bundles. Two types of asbestos amphiboles were detected in these samples, they were either the tremolite asbestos solid solution series and or the anthophyllite solid solution series asbestos. Only the iron-rich anthophyllite asbestos was detected in the ATEM.

The amphibole asbestos structures per gram of talc ranged from below our analytical sensitivity/detection limit of approximately 3,000 - 9,400 fibers/bundles per gram to an amphibole asbestos concentration that ranged from 4,400 - 268,000 fibers-bundles/gram of talc. Also, for the positive ATEM samples the results were also expressed as a weight percent.

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Tables 2 through 6 also provide the summary of ATEM findings for each of the 42 positive ATEM samples that were detected and the identification of the asbestos type for each of the measured amphibole asbestos fiber or bundles. This data includes length and width of the asbestos structure, individual fiber/bundle aspect ratios, and the average aspect ratio for each sample set.

All MAS and ISO PLM, Blount/PLM, ATEM analytical data, and photo-micrographs can be found in notebooks provided with this report that are labeled Historical 1960's, 1970's, 1980's, 1990's Early 2000's and JBP (with Asian)/STS and Imerys' Analysis.

Each of these notebooks contain ISO PLM and Blount bench sheets and optical photo-micrographs for each sample. ATEM count sheets, EDXA spectra, SAED micrographs, and ATEM photo-micrographs for each of the regulated amphibole asbestos structures analyzed are included.

All the J³ XRD and ISO PLM analyses are summarized in Tables 7 & 8. Also provided in Table 8 is a comparison of the J³ ISO-PLM to the MAS ISO-PLM for the same sample analyses.

Fibrous Talc JBP (with Asian)/STS Containers and Imerys Railroad Car Samples

The MAS ISO 22262-1 PLM analysis showed that fibrous talc was found in 56 of 57 total samples (55 of 55 JBP (with Asian)/STS and Imerys analyzed by this method and of the 72 samples analyzed by the Blount/PLM method, 28 of the samples were positive for fibrous talc.

The MAS ISO 22262-1 and Blount PLM samples had concentrations of fibrous talc that ranged from trace to common (moderate) amounts.

For the MAS ISO 22262-2 ATEM analysis (no J³ ATEM results), 42 of the 56 containers/samples (74%) analyzed contained trace amounts of fibrous talc. The estimated amount of fibrous talc per gram ranged from 290,000 talc fibers to 1,020,000 talc fibers per gram of cosmetic talcum powder.

No attempt was made to determine the amount of talc in 16 J³ STS sample analysis ATEM bench sheets since it was unclear to us regarding the J³ data collecting parameters and the amount of fibrous talc detected in the samples. This data is summarized in Table 9.

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Process Blanks

All of the process blanks that were run with each set of talcum powder samples were found to be negative for any asbestos fiber types. The ATEM bench sheets and summary are provide in a separate document supplied with this report.

Discussion

XRD ISO 22262-3

All of the historical JBP/STS containers, where the source of the talc was either Italian or Vermont were found to be negative or non-detect by XRD. For the seven (7) Asian samples, two (2) of the samples were positive by the XRD analysis and one sample was inconclusive. The source of the talc that J&J used in these Asian products was from the Korean Dongyang talc mine in Korea. This talc mine has been characterized in the past as an asbestiform tremolite asbestos talc mine. The documentation concerning the Dongyang mine Korea talc deposit and J&J's use of the talc from that has been produced to J&J in the *Leavitt* deposition.

The results show that the XRD method for either the Italian or Vermont cosmetic talc samples was inadequate to detect any tremolite or anthophyllite amphiboles at the concentrations found by the other analytical methods used (ISO PLM, Blount PLM and ATEM).

For the Asian historical J&J cosmetic talc samples, two of the seven were positive for amphibole asbestos. When these same samples were analyzed by the ISO-PLM, Blount/PLM and ATEM methods, six of seven samples were found to be positive for tremolite asbestos.

Based on these results there seems to be little value, even as a screening tool, to use XRD for cosmetic talcum powder samples when the source of talc is either from the Italian or Vermont mines. However, if the source of talc is from the Dongyang mine in Korea, there may be some limited value to use XRD as a preliminary screening tool for a tremolitic type talc mine.

Since all 42 Vermont-sourced cosmetic talc samples were found to be negative for amphibole asbestos, there was no useful reason to analyze these additional 15 Imerys railroad car samples by XRD since the source of these Imerys cosmetic talc samples is from the same Vermont talc mines.

MAS PLM-ISO 22262-1 Method

The ISO PLM analysis performed by MAS detected 18 positives out of 56 samples that were analyzed. Many of the samples analyzed contained tremolite/actinolite cleavage fragments that had a typical aspect ratio of less than 3:1. No anthophyllite cleavage fragments were detected in any of the samples. For the positive samples, both regulated tremolite/actinolite and anthophyllite asbestos was detected at an estimated concentration of <0.1 weight percent.

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All of the asbestos structures identified were large bundles that were typically greater than 50 microns long and 10 to 20 microns wide. No individual asbestos bundles were detected in any of these samples with widths less than 5 to 10 microns. However, individual fibers contained in these large bundles could be resolved with dispersive staining. The estimated average aspect ratio of the individual asbestos fibers in the bundles was greater than 20:1.

Lee Poye of J³ Resources analyzed 22 historical JBP/STS by the ISO PLM that were provided by MAS, and their 16 historical Vermont STS samples by this method. All 38 ISO PLM analysis were reported as non-detects.

When the same 21 historical JBP/STS samples were analyzed by MAS, 8 of the samples were found to be positive.

These differing results between the two labs will require further investigation to understand the reason for these differences.

Blount/PLM Method

The Blount /PLM method heavy liquid separation method was able to increase the analytical sensitivity of the PLM analysis as compared to the ISO PLM method without heavy liquid separation. Of the 72 historical JBP (with Asian)/STS containers/samples analyzed by this method, 41 (57 %) were positive for regulated amphibole asbestos. For the positive samples, both regulated actinolite/tremolite and or anthophyllite asbestos were detected at a weight percent concentration for range of between <0.1% to 0.7 %. The estimated average aspect ratio of the individual asbestos fibers in the bundles was greater than 20:1.

When Dr. Blount published her heavy liquid separation PLM results in 1989/1990, one of the samples (sample I) was analyzed for tremolite asbestos. This sample was later determined to be a container of Johnson's Baby Powder.^{3, 4} The source talc used by J&J, for their JBP product at that time (1989-1990), would have been from Vermont.

Our use of Blount PLM method, in particular for the Vermont sourced cosmetic talc samples, shows that Alice Blount was right and that her method increases the sensitivity of the PLM analysis for the detection of amphibole asbestos.

Dr. Blount published the use of the heavy liquid separation method in 1989/1990, however this was not a new technology for the analysis of cosmetic talc by PLM. Historical documents produced by J&J in this litigation shows that J&J was aware of the heavy liquid separation ("preconcentrating") of talc for the detection of asbestos in the early 1970s.⁸ In 1973, a two

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part heavy liquid separations method report, for both chrysotile and tremolite-actinolite fibers, was done by the Colorado School of Mines on behalf of Johnson & Johnson.⁷

For this report, the Colorado School of Mines stated in their Summary and Conclusion section that the heavy liquid concentrates are examined by optical microscopy (PLM), and that “the procedure is capable of detecting fibers present at a level of approximately 10 ppm or less”.⁸ A 10 ppm (parts per million) detection limit calculates to a weight percent of 0.001 % which is consistent with our Blount PLM analysis of <0.1 % for positive samples.

In March of 1974, R.C. Reynolds Jr. wrote a report for Windsor Minerals Inc. entitled “Analysis of Talc Products and Ores for Asbestiform Amphiboles”.⁹ This method also used heavy liquid separation and PLM analysis. The purpose of the study was to “develop methods for measuring the concentration of asbestiform amphiboles in fine-grained talc products and talc ores”. The report concluded that using this method detected 170 ppm (0.017 weight percent) of actinolite in a talc product and 2,300 ppm (0.23 weight percent) of actinolite in the talc ore.

Even though Johnson & Johnson was aware from as early as 1973 that the heavy liquid separation PLM method increased the sensitivity for the detection asbestos in talc, they never incorporated this method for the routine analysis of their talc sources. Even when Dr. Blount published her heavy liquid separation PLM method in 1990, J&J still did not incorporate this more sensitive PLM method for the detection of asbestos in their cosmetic talc products.

It is clear from our data that the use of the Blount/PLM heavy liquid separation method increases the analytical sensitivity for the analysis of cosmetic talc samples like the JBP/STS products as compared to the ISO PLM method. Since some of the ISO 22262-1 PLMs were positive for the same samples that were non-detects by the Blount method, it’s recommended that both PLM methods should be used to evaluating cosmetic talc samples for asbestos.

J³ Resources, Inc.

Our ATEM results for the historical JBP/STS samples are in agreement with the J³ Resources, Inc. ATEM for the STS samples that they analyzed. For the nine J³ samples that we verified from their TEM grids, J³ also reported nine positive TEM samples and all contained regulated amphibole asbestos fibers/bundles. This correlates to 100 % agreement between the two labs for those nine samples.

For the 49 asbestos fibers and or bundles reported by J³ in the 9 nine ATEM samples we examined, we verified 48 as regulated asbestos structures. This shows a 98 % validation rate

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between the labs. Additional analysis may in fact increase the overall verification percentage. Also, 90 % of the regulated anthophyllite asbestos structures were bundles.

The two J³ ATEM samples (20180061-65D and 20180061-10D) that MAS did not verify, were verified to contained amphibole asbestos by the Blount PLM method. Even though we did not verify these two J³ samples by ATEM, we did find that these two J&J containers/samples were positive for regulated amphibole asbestos. For this reason, STS samples 20180061-65D and 20180061-10D were added to the overall list of positive 1980s historical J&J STS Vermont sourced talc containers.

ATEM-ISO 22262-2 Method

The ISO 22262-2 heavy liquid talc preparation method for the direct ATEM analysis of approximately 20 to 60 mg of talc on a 25 mm PC filter did not cause any significant overloading of the TEM grids with talc particles. The overall TEM grid particle loading was estimated at approximately 15 to 20 %. This consisted of talc particles and/or fibers as well as detectible amphibole asbestos. The ATEM results showed that out of the 70 JBP/STS and Imerys samples analyzed by ATEM, both the MAS and Lee Poye's analyses, 42 were positive for either the tremolite solid solution series (tremolite, winchite, richterite and actinolite) in this case only tremolite was detected, and or the anthophyllite sold solution series (anthophyllite, iron-rich anthophyllite and cummingtonite) asbestos. Each of the tremolite or anthophyllite asbestos solid solution series amphibole mineral types are regulated asbestos.¹⁸ Only iron-rich anthophyllite sold solution series asbestos structures was detected.

If the same weight of talc (approximately 20 to 60 mg) had been directly filtered onto a 25 mm PC filter, the TEM sample preparations would have been too severely overloaded with talc particles to be analyzed.

The heavy liquid density ATEM sample preparations demonstrated the utility of the ISO 22262-2 talc method by increasing the analytical sensitivity of the typical ATEM bulk talc analysis for the potential detection of amphibole asbestos. For these analyses the analytical ATEM achieved sensitivity/detection limits ranging from approximately 3,000 - 9,400 fibers-bundles/gram of talc. It also increased the analyst's efficiency without talc particle overloading issues.

This TEM talc loading problem vs. analytical sensitivity issued was been solved by the use of the heavy liquid density procedure, and should be the standard protocol for TEM cosmetic talc analysis.

¹⁸ Current Intelligence Bulletin 62: "Asbestos Fibers and Other Elongated Mineral Particles". State of the Science and Roadmap for Research" Revised Edition. NIOSH CIB62-Asbestos.

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As compared to either the XRD or the two PLM methods, the ATEM provides the most sensitive method for the detection of regulated amphibole asbestos in cosmetic talc.

Numerical Structure Count vs. Weight Percent

Our ATEM analysis showed that the asbestos fiber/bundle concentration, in the 41 positive samples ranged from approximately 4,400 to 268,000 fibers-bundles per gram of talcum powder. These positive results were also reported in weight percent that is based on a mathematical calculation. Also the analytical sensitivity or detection limit for the weight percent used here was based on the average size of all amphibole asbestos structures detected (187) in the 41 positive ATEM samples. This average size was determined to be 12.1 μm x 1.1 μm , with an aspect ratio of 11:1.

However, just reporting ATEM weight percent data does not provide any useful information for determining potential airborne exposure to asbestos structures of the bulk talc material being tested. The Introduction to the ISO 10312 Ambient Air TEM Method states the reasoning for this:

"Because the best available medical evidence indicates that the numerical fibre concentration and the fibre sizes are the relevant parameters for evaluation of the inhalation hazards, a fibre counting technique is the only logical approach".

Also, reporting the analytical sensitivity in weight by the ATEM method is very misleading since it is based on the theoretical mathematical calculation of one minimal fiber size which can give a computed analytical sensitivity in the millionths of a percent range. The misleading part of this is that in order to find that one small fiber during the ATEM analysis, you must have a real numerical fiber-bundle concentration per gram of talc for the analysis to possibly find that one fiber, otherwise this ATEM theoretical analytical sensitivity expressed in weight percent is meaningless.

An example of this problem can be found with the 2010 FDA report of the testing of cosmetic talcs that is published on their website. In that report, FDA states a TEM average limit of detection of 0.0000021 % wt. or 2.1×10^{-6} .¹⁹ However, when the ATEM analytical sensitivity was calculated from actual AMA TEM bench sheets, the numerical fiber concentration needed to find that one fiber was 13,500,000 fibers per/gram of talc.²⁰ A one fiber analytical sensitivity of that magnitude would have caused all of the ATEM analyses reported here to be non-detects.

¹⁹ www.FDA.gov.

²⁰ AMA Analytical Services, Inc. Report of Cosmetic Grade Talc, 2010.

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**Crystalline Habit and Asbestiform Definitions**

Each of the analytical protocols referenced in this report (PLM and TEM) all have a definition for asbestiform that is some variation of the following statement:

*Asbestiform: specific type of mineral fibrosity in which the fibers and fibrils possess high tensile strength and flexibility.*¹³

This definition of asbestiform in these protocols is only a general geological definition that might be used in the field to evaluate a particular commercial asbestos mine site, because the more fibrous, the greater economic value of the mine.

If this wasn't meant to be a general geological definition, then the methods would have incorporated into the counting protocols the procedures necessary for the determination or measurement of either the tensile strength or flexibility of the microscopic asbestos fibers and bundles. Of course, the methods do not measure flexibility or strength since that type of measurement is impossible by either PLM or ATEM. None of these methods even define what high tensile strength is, or how many measurements constitute a population. Interesting enough, as compared to the commercial forms of asbestos (chrysotile, amosite and crocidolite), both tremolite and anthophyllite asbestos have low tensile strength and poor flexibility and yet are regulated asbestos fibers.²¹

Also, the vast majority of the fibrous amphibole asbestos structures reported here were bundles (as defined by parallel fibers in an asbestos structure that are closer than one fiber diameter to each other.

It is unreasonable to think that breaking up a non-fibrous asbestos can form multiple individual fibers all in close proximity and parallel to each other and that meets the definition of a bundle. That is why fibrous mineral bundles have been recognized in the published literature as asbestiform for many years.

In Blount's publication, she states the following:

*"In addition, the tendency to bring down a disproportional number of larger particles has the true asbestiform amphiboles one generally sees some particles showing bundles of fibrils which removes any doubt about the nature of the amphibole".*⁵

²¹ "Asbestos in Ontario, Ontario Department of Mines and Northern Affairs." Industrial Mineral Report 36, 1971.

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Dr. Wiley in her 1999 ASTM International publication stated that the finding of bundles shows that the structure should be considered asbestiform.²²

The total amount of regulated asbestos structures counted in the 42 positive ATEM samples was 187 bundles and fibers. Asbestos bundles, as compared to fibers, was approximately 96 % of the regulated asbestos structures counted in the ATEM positive samples.

By definition, these asbestos bundles are all classified as asbestiform. Nevertheless, all fibers and bundles reported by the ATEM method are regulated asbestos structures regardless of the geological definition for asbestiform.

For the single tremolite or anthophyllite fibers reported here, they all have been verified as to have formed in a fibrous crystalline habit since they are both fibrous and crystalline as well as meet the health based counting rules for regulated asbestos.²³

Aspect Ratio

Another aspect that must be considered is the milling process that is required to produce cosmetic grade talc and how it effects the overall asbestos size distribution and aspect ratios. This milling effects the asbestos size distribution in talcs was first discussed by Rohl, et al. in 1976.²⁴ In their publication the authors discuss how the talc milling process will break large fibers into a new size distribution in the submicroscopic range.

The average aspect ratio of the regulated asbestos tremolite and anthophyllite fibers and bundles measure by our ATEM analysis was approximately 11:1. This average aspect ratio was consistent with Campbell data for milled tremolite and anthophyllite asbestos. Our measured average aspect ratios were also consistent with Blount's data for tremolite asbestos reported in sample I (identified as JBP).^{4, 25}

For just the tremolite asbestos structure aspect ratios reported here, are also consistent with the NIST tremolite asbestos standard, Blount's tremolite asbestos findings for the off the shelf cosmetic talc container she tested, Campbell's milled tremolite asbestos and Langer & Nolan's

²² A.G. Wylie "The Habit of Asbestiform Amphiboles: Implications for the Analysis of Bulk Samples", ASTM Advances in Environmental Measurements Methods for Asbestos, STP 1342, Jan. 2000.

²³ Manual of Mineralogy, Twenty-First Edition, Revised, Cornelis Klein and Cornelis S. Hurlbert, Jr., John Wiley and Sons, 1999.

²⁴ Rohl, et al., "Consumer Talcum and Powders: Mineral and Chemical Characterization", Journal of Toxicology and Environmental Health, 2: pp. 255-284, 1976.

²⁵ Bureau of Mines Information Circular/Dept. of the Interior, Campbell, W.J., Blake, R.L., Brown, L.I., Cather, E.E. and Sjoberg, J.J.: United States Department of the Interior, "Selected Silicate Minerals and Their Asbestiform Varieties" IC 8751 1977.

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published tremolite asbestos aspect ratio of 10.9 to 1. In the Blount publication, it was reported that the average aspect for non-asbestiform tremolite (cleavage fragments) was approximately 2:1.

Asbestiform tremolite/anthophyllite aspect ratio summary is as follows:

1. MDL ATEM analysis: : 11:1
2. Blount : 9:1
3. Campbell : 9:1
4. Langer : 11:1
5. J&J 3/11/2018 : 10:1
6. NIST 1875 Tre. Std. : 10:1

All of these independent laboratory tremolite asbestos aspect ratio data shows that the tremolite and anthophyllite structures detected by our ATEM analysis shows that they are in fact asbestiform.

As anticipated and discussed below, neither chrysotile nor non-iron containing anthophyllite asbestos was found in any of the samples that were analyzed by ISO 22262-02 ATEM analysis.

So Called Background Asbestos

Of the 42 positive ATEM amphibole asbestos samples analyzed by MAS, nine of the JBP/STS talcum powder samples had only one amphibole asbestos fiber or bundle detected in 100 grid openings which represents the analytical sensitivity/limit of detection for this analysis.

Because tremolite/anthophyllite are non-commercial accessory amphibole minerals and are associated with talc, which is known to contain varying amounts of amphibole asbestos such as tremolite or anthophyllite, any positive findings are scientifically valid due to the amphibole minerals present in the talc.

There are no known commercial asbestos-containing products that used tremolite as an added ingredient, and only one specialty product ever used anthophyllite asbestos (corrosive resistant polymer chemical piping used at some chemical processing plants).

Further, there are no commercial amphibole tremolite/anthophyllite mines in North America, and tremolite and anthophyllite asbestos is not routinely analyzed at trace levels by typical commercial TEM laboratories. For these reasons it can be stated that: 1) there are no background air levels of tremolite/anthophyllite that could have interfered with or contaminated our JBP/STS and Imerys talcum sample analysis, and 2) for each set of JBP/STS

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and Imerys talcum samples that were prepared and analyzed at this laboratory a process laboratory blank was prepared simultaneously to determine if there was any possible cross-contamination.^{26,27}

When these process laboratory blanks were analyzed by ATEM, no asbestos, including either tremolite, chrysotile or anthophyllite asbestos structures were found. Therefore, it can be stated that there was no cross-contamination during sample preparation of the JBP/STS talcum powder samples. Also, it is not our expectation that tremolite/anthophyllite asbestos would become a part of these homogenized talc products at a level identified as a matter of contamination prior to our custody of the samples. To do so would be practically impossible.

Also, these historical 72 JBP/STS containers and Imerys railroad samples came from their respective archived facilities. It is reasonable that the talcum powder in either the J&J containers or the Imerys railroad car samples were authentic and original to the specified date of manufacture (J&J containers) or time of product processing (Imerys). That is the talcum powder contained in these historical J&J container samples we analyzed, was the original talcum powder that was put into the container by J&J.

Non-Detects

For the 70 JBP (with Asian)/STS and Imerys talcum powder samples analyzed, ATEM results for 28 JBP/STS and Imerys talcum powder samples were less than the limit of detection of approximately 3,000 to 9,400 amphibole fibers/bundles per gram of talc. This result cannot be characterized to mean the samples do not contain amphibole asbestos. Rather, it can only be said that if there is any amphibole asbestos present, the number of fiber and bundles per gram of talc are at less than the detection limit for the ISO 22262-2 heavy liquid separation ATEM analysis used by this laboratory.

Chrysotile and Anthophyllite

As anticipated, neither chrysotile nor non-iron containing anthophyllite asbestos was found in any of the 70 samples that were analyzed by the ISO 22262-02 ATEM analysis. However, iron-rich anthophyllite was detected by ATEM because of its increased density.

²⁶ R.F. Dodson, M.F. O'Sullivan, D.R. Brooks and J.R. Bruce, "Asbestos Content of Omentum and Mesentery in Non-occupationally Exposed Individuals", *Toxicology and Industrial Health*, 2001: 17: pp. 138-143.

²⁷ R.J. Lee, D.R. Van Orden, "Airborne Asbestos in Buildings", *Regulatory Toxicology and Pharmacology*, 50 (2008) pp. 217-225.

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As with the ATEM method used here, the Blount PLM also uses heavy liquid separation in the sample preparation methodology.

The following is an explanation for the ATEM and Blount PLM chrysotile and anthophyllite results.

ATEM Chrysotile Separation

The ATEM heavy liquid method is specific for the asbestos tremolite solid solution series and the iron-rich anthophyllite solid solution series. The reason for this is that the heavy liquid solutions used for ATEM talc separation process had a density of 2.85 g/cm³. Therefore, any minerals with a similar density or lower would not be separated by this method such as chrysotile, which has a density of between 2.5 to 2.6 g/cm³.²⁸ The density for chrysotile is 0.020 g/cm³ to 0.025 g/cm³ less than the heavy liquid density used for the ATEM method and therefore, chrysotile asbestos would likely not be separated during JBP/STS and Imerys talcum sample preparation process.

As with the chrysotile non-detects reported here and in well over a hundred cosmetic talc analyses performed by MAS, the ATEM heavy liquid method has never detected chrysotile asbestos in the talcum powder, nor would we expect to have a positive result for chrysotile.

ATEM Anthophyllite Solid Solution Series Separation

The density of anthophyllite ranges from 2.85 to 3.20 g/cm³. This range of densities is primarily due to the addition of iron (Fe) into the chemical structure. For example, anthophyllite is part of a solid solution series (anthophyllite, iron-rich anthophyllite, ferro-anthophyllite, cummingtonite and grunerite) with a chemical formula of Mg₇Si₈O₂₂(OH)₂ to approximately Fe₇Mg₅Si₈O₂₂(OH)₂. Without Fe being present, the density of anthophyllite would be at the lower end of the density gradient of 2.85 g/cm³. Again, since anthophyllite is a solid solution series, the amount of iron atoms that can be substituted into the molecular formula of anthophyllite depends on the iron content of the surrounding rocks. This iron atom substituted could be 0, 1, 2 or higher which accounts for the range of anthophyllite densities described here.

With a low to non-iron anthophyllite density of approximately 2.85 to 2.86 or 2.87 g/cm³, which is the same or very close as the heavy liquid used for the ATEM analysis, one would not expect much separation of this type of either low-iron or non-iron containing anthophyllite from the

²⁸ Manual of Mineralogy, Twenty-First Edition, Revised, Cornelis Klein and Cornelis S. Hurlbert, Jr., John Wiley and Sons, 1999.

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talcum powders using the ISO 22262-2 ATEM method and typically would not be detected by our analysis if present.

As expected, all of the anthophyllite series asbestos structures detected in these talcum powder samples by ATEM were iron-rich; no low iron or non-iron anthophyllite was detected in any of the ATEM samples. For the Vermont talc sourced samples, only three samples contained detectable amounts tremolite series asbestos fibers/bundles. However, this does not mean actinolite/tremolite is not present in significant concentrations in the Vermont talc mines. The ISO 22262-2 and Blount/PLM analysis detected regulated actinolite/tremolite asbestos in 30 of the JBP/STS containers and Imerys railroad car samples. These results is further verification of the utility of using both PLM (with and without heavy liquid separation) and ATEM for analyzing cosmetic talc samples.

Blount PLM Separation

As described above, the ATEM detected only iron-rich anthophyllite asbestos primarily in the Vermont-sourced talcum powder samples which is consistent with the Blount PLM results. Comparing the type of asbestos detected (tremolite and anthophyllite) between the Blount PLM and ATEM analysis where the same sample is positive by both methods, the asbestos types found (either anthophyllite and or actinolite/tremolite) can be different between the two as already discussed in this report.

For example, the analysis for the historical JBP/STS and Imerys samples, showed a number of samples where the only type of asbestos detected by ATEM was the iron-rich anthophyllite, while the Blount PLM not only detected the anthophyllite but also detected actinolite/tremolite. This amphibole asbestos detection difference between the two methods may at times be a function of the different heavy liquid densities used for the Blount/PLM and ATEM protocols.

The Blount PLM protocol specifies a heavy liquid density of 2.810 g/cm³ as compared to the ISO 22262-2 ATEM method that uses a heavy liquid density of 2.85 cm³. This difference of 0.04 g/cm³ is lower than the density of a low to non-iron anthophyllite. This lower density liquid used in the Blount PLM method would likely be more efficient in separating out the tremolite than the higher density liquid used by the ATEM method. Quite simply, the actinolite/tremolite structures would sink faster in the lower density liquid used by the Blount/PLM method. Also, the lower density liquid would be more efficient in separating out the low to non-iron anthophyllite asbestos.

This difference in the heavy liquid density between the two methods maybe explain why the number of positive Blount/PLMs for amphibole asbestos and the corresponding ATEM amphibole asbestos analysis were non-detect.

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This density difference coupled with the ATEM's bias to the large amphibole asbestos bundles detected by the PLM method shows how important it is to use both of these methods when analyzing cosmetic talc samples.

These overall results are both consistent with and validates our earlier March 11, 2018 Supplemental JBP/STS Report and subsequent analysis of plaintiffs' personal JBP/STS containers.

However, for our testimony, we will only be relying on this report and any future supplemental reports involving the analysis of historical JBP/STS and Imerys containers and samples except for the earlier two JBP samples used in both our Below the Waist and Baby powdering studies.

These results are also consistent with MVA's analysis of talc ore samples from both the Italian and Vermont talc mines where originally the samples were collected by or on behalf of defendant experts.^{29, 30}

Also, our analytical results are consistent with the historical analysis of both Johnson & Johnson's product samples as well as the analysis of talc ore from both the Italian and Vermont mines that have been performed in the past.^{31,32,33,34,35,36,37,38,39,40}

In addition to the above references, we are also relying on the current MAS Johnson & Johnson reliance document list that contains 102 references.⁴¹

²⁹ D.R. Veblen and C.W. Burnham, "New Biopyriboles Chester, Vermont: I. Descriptive Mineralogy", American Mineralogist, 63: 1000-1009, 1978.

³⁰ R.L. Virta, "The Phase Relationship of Talc and Amphiboles in a Fibrous Talc Sample, Bureau of Mines Report of Investigations 8923, United States Department of the Interior, 1985.

³¹ November 26, 1990 McCrone Environmental Services Report to Michael J. Keener from Kent Sprague concerning Samples CWM 90-28, 9-29 and 90-30

³² New Reagent Systems-Plant Trial at Windsor Minerals, Inc.

³³ March, 1974 Memo to: Windsor Minerals, Inc., Windsor, Vermont From R.C. Reynolds, Jr. Department of Earth Sciences, Dartmouth College, New Hampshire

³⁴ Forensic Analytical: Quantitative Analysis Report, Asbestos in Bulk Material.

³⁵ May 15, 1984 MSHA visit to Cyprus Industrial Minerals Company, South Plainfield Mill.

³⁶ Nov. 19, 1975 McCrone Assoc., Inc. Letter to Mr. Vernon Zeitz from Gene Grieger concerning talc ore sample analysis.

³⁷ Env. Consultant Report to Johnson & Johnson, April 1, 1977

³⁸ EMV Consultant Report to Johnson & Johnson, April 1, 1977

³⁹ Jan. 30, 1987 to J.A. Molnar and R.N. Miller from Joseph Schmidt Talc Analysis.

⁴⁰ March 14, 1988 to Mathew A. Nunes from Al Dickey, R.J. Lee Group Ref: Talc Samples 879-57 Talc L.

⁴¹ Johnson & Johnson Reliance and Reviewed Documents (95).

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The ATEM and ISO PLM analysis also showed that the majority of the JBP/STS talcum powder samples contained fibrous (asbestiform) talc as compared to the platy talc that is present in all of JBP/STS and Imerys talcum powder samples. It has been reported by others that fibrous talc is a geological metamorphic transformation of anthophyllite to fibrous talc.^{42,43}

Conclusion

All Italian or Vermont talc sourced samples that were analyzed by XRD for asbestos were found to be negative or non-detect. These results show that the XRD method is not a useful tool at all for analyzing cosmetic talc samples (Italian or Vermont sourced talc) for the presence of asbestos amphiboles. Both the ISO and Blount PLM methods have better analytical sensitivities than XRD for these types of samples. It would be highly recommended that the Stimuli Group drop any consideration of using the XRD for their rewrite of USP 40 method.⁴⁴

The use of the ISO 22262-1 PLM analysis was not as sensitive as the Blount PLM method, but both methods have their strengths and weakness. On one hand the Blount PLM method has higher sensitivity, but is limited by the type of anthophyllite asbestos it can detect. The ISO PLM has lower sensitivity, but can detect the entire anthophyllite solid solution series. Also, these two PLM methods can detect the very large bundles that are typically missed by the ATEM analysis. There are few examples where the sample was positive by PLM and negative by ATEM.

It is recommend then that both the ISO PLM and the Blount method should be used as a screening tool for cosmetic talc analysis. Negative samples should then be required to be analyzed by the heavy liquid density ATEM method, which is still the best tool for these types of analysis.

Our ATEM analysis showed that the Italian and Vermont talc mines have a very distinct asbestos type profile from each other when analyzed by this method. The historical samples from the Italian mine contained primarily regulated tremolite asbestos fibers/bundles while the Vermont mine contained primarily anthophyllite asbestos. However, for the MDL samples that contained Vermont sourced talc, the PLM results show that only six positive samples contained anthophyllite only, the rest of the positive PLM samples, for the two methods, had detectable amounts of regulated actinolite/tremolite asbestos. These results show that anthophyllite asbestos maybe more prevalent in Vermont talc when analyzed by ATEM, but significant concentrations of actinolite/tremolite asbestos is also present as shown in the PLM analysis.

⁴² MVA Report: MVA11730 "Investigation of Italian Talc Samples for Asbestos", August 1, 2018.

⁴³ MVA Report: MVA12588 "Investigation of Talc Samples for Asbestos" April 23, 2018.

⁴⁴ Stimuli to the Revision Process-Modernization of Asbestos Testing in USP Talc.

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It is clear from these results that the three talc mines (Italian, Vermont and Korean) J&J used to manufacture their historical talcum powder products all contain asbestiform/regulated amphibole asbestos structures.

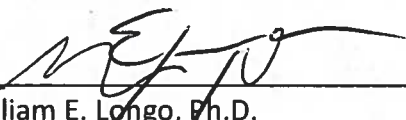
These overall results are both consistent and validates our earlier March 11, 2018 Supplemental JBP/STS Report and subsequent analysis of plaintiffs' personal JBP containers.

The most sensitive analytical method was ATEM with the ISO 22262-02 heavy liquid separation. It detected 42 positive samples out of the 70 JBP/STS and Imerys' talcum powder samples with a range in concentration of from approximately 4,400 fibers-bundles/gram to 268,000 fibers-bundles/gram of talc. Both tremolite series and anthophyllite series regulated asbestos were found in these samples.

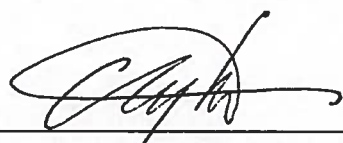
There was a total of 50 positive containers (ATEM and PLM combined) out of the 72 tested that gave an overall 69 % positive result for the historical JBP/STS containers and Imerys' railroad car samples that were tested for this report.

These results are also consistent with our past analysis of Johnson & Johnson cosmetic talc samples that contained tremolite and anthophyllite regulated asbestos fibers, and with MVA's analysis of both the Italian and Vermont talc mine ore samples.

Based on the results of our analysis, it is our opinion that individuals who used Johnson & Johnson talcum powder products (Johnson's Baby Powder and Shower to Shower) in the past would have, more likely than not, been exposed to significant airborne levels of both regulated amphibole asbestos and fibrous (asbestiform) talc.



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Table 2

**Summary of Results for Johnson & Johnson's
 1960's Historical JBP & STS Samples**

MAS Sample Number	Client Sample ID	Year of Mnfr.	Amphibole Asbestos Structures/g	Amphibole Asbestos wt. %	Analytical Sensitivity Structures/g	ISO PLM wt. %	Blount PLM wt. %
M68503-010 JBP	2018-0060-04 JBP 167	1960	31,400	0.00056	8,500	NAD	<0.1 Trem/Act
M68503-009 JBP	2018-0060-03 JBP 166	1962	17,700	0.0000057	8,800	NAD	<0.1 Trem/Act
M68503-024 JBP	2018-0060-76 JBP 119	1963	<8,972	<0.0000268	9,000	NAD	NAD
M68503-004 JBP	2018-0056-25 JBP 232	1964	<2,990	<0.0000268	3,000	<0.1 Trem/Act	NAD
M68503-014 JBP	2018-0060-20 JBP 183	1965	17,300	0.000044	8,700	NAD	NAD
M68503-011 JBP	2018-0060-06 JBP 169	1966	<6,072	<0.0000268	6,100	NAD	NAD
M68503-027 STS	2018-0061-09 STS 043	1966	<2,998	<0.0000268	3,000	NAD	NAD
M68503-019 JBP	2018-0060-44 JBP 087	1967	8,930	0.000045	8,900	NAD	NAD
M69042-003 JBP	20180056-31 JBP 238	1967	18,000	0.0000033	9,000	NAD	NAD
M69042-005 JBP	20180060-25 JBP 188	1967	<8,740	<0.0000268	8,700	NAD	NAD
M69042-006 JBP	20180060-49 JBP 092	1967	<5,932	<0.0000268	5,900	NAD	NAD
M69042-007 JBP	20180060-50 JBP 093	1967	<5,930	<0.0000268	5,900	NAD	NAD
M68503-038 JBP	2018-0061-40 STS 004	1968	<3,045	<0.0000268	3,050	NAD	NAD
M68503-026 STS	2018-0061-08 STS 042	1969	268,000	0.0064	8,650	<0.1 Trem/Act	<0.1 Trem/Act

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**M68503-010**

Str. #	Length (μm)	Width (μm)	Aspect Ratio	Structure Type	Asbestos Type
-1	7.0	0.7	10.0	Bundle	Tremolite
-2	12.0	0.9	13.3	Bundle	Tremolite
-3	20.0	3.5	5.7	Bundle	Tremolite
-4	3.7	0.5	7.4	Bundle	Tremolite

Average Aspect Ratio: 9.1

M68503-009

Str. #	Length (μm)	Width (μm)	Aspect Ratio	Structure Type	Asbestos Type
-1	3.8	0.72	5.3	Bundle	Tremolite
-2	3.5	0.42	8.3	Bundle	Tremolite

Average Aspect Ratio: 6.8

M68503-014

Str. #	Length (μm)	Width (μm)	Aspect Ratio	Structure Type	Asbestos Type
-1	8.6	1.3	6.6	Bundle	Tremolite
-2	7.9	0.84	9.4	Bundle	Tremolite

Average Aspect Ratio: 8.0

M68503-019

Str. #	Length (μm)	Width (μm)	Aspect Ratio	Structure Type	Asbestos Type
-1	20.0	1.0	20.0	Bundle	Anthophyllite

Average Aspect Ratio: 20.0

M69042-003

Str. #	Length (μm)	Width (μm)	Aspect Ratio	Structure Type	Asbestos Type
-1	4.52	0.44	10.3	Bundle	Tremolite
-2	3.4	0.42	8.1	Bundle	Anthophyllite

Average Aspect Ratio: 9.2

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**M68503-026**

Str. #	Length (μm)	Width (μm)	Aspect Ratio	Structure Type	Asbestos Type
-1	7.1	0.4	17.8	Bundle	Tremolite
-2	10.6	1.8	5.9	Bundle	Tremolite
-3	3.1	0.23	13.5	Fiber	Tremolite
-4	7.6	0.8	9.5	Bundle	Tremolite
-5	3.2	0.5	6.4	Bundle	Tremolite
-6	7.3	1.2	6.1	Bundle	Tremolite
-7	7.3	0.7	10.4	Bundle	Tremolite
-8	9.8	1.8	5.4	Bundle	Tremolite
-9	4.3	0.8	5.4	Bundle	Tremolite
-10	7.0	0.8	8.8	Bundle	Tremolite
-11	7.4	1.1	6.7	Bundle	Tremolite
-12	13.3	0.7	19.0	Bundle	Tremolite
13	3.7	0.45	8.2	Bundle	Tremolite
-14	3.4	0.6	5.7	Bundle	Tremolite
-15	3.2	0.23	13.9	Bundle	Tremolite
-16	30.8	4.0	7.7	Bundle	Tremolite
-17	2.8	0.5	5.6	Bundle	Tremolite
-18	7.9	0.92	8.6	Bundle	Tremolite
-19	7.5	0.8	9.4	Bundle	Tremolite
-20	3.9	0.6	6.5	Bundle	Tremolite
-21	4.1	0.6	6.8	Bundle	Tremolite
-22	3.0	0.46	6.5	Bundle	Tremolite
-23	24.4	3.0	8.1	Bundle	Tremolite
-24	6.5	1.1	5.9	Bundle	Tremolite
-25	8.6	0.92	9.3	Bundle	Tremolite
-26	27.6	3.7	7.5	Bundle	Tremolite
-27	18.4	2.3	8.0	Bundle	Tremolite
-28	75.9	4.6	16.5	Bundle	Tremolite
-29	9.2	1.4	6.6	Bundle	Tremolite
-30	4.6	0.7	6.6	Bundle	Tremolite
-31	6.9	1.0	6.9	Bundle	Tremolite

Average Aspect Ratio: 8.7

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Table 3
Summary of Results for Johnson & Johnson's
1970's Historical JBP & STS Samples

MAS/J ³ Sample Number	Client Sample ID	Year of Mnfr.	Amphibole Asbestos Structures/g	Amphibole Asbestos wt. %	Analytical Sensitivity Structures/g	ISO PLM wt. %	Blount PLM wt. %
M68503-005 JBP	2018-0056-30 JBP 237	1970	<8,778	<0.0000268	8,780	NAD	NAD
M69042-009 JBP	20180060-68 JBP 111	1970	<6,371	<0.0000268	6,370	<0.1 Trem/Act	NAD
M68503-029 JBP	2018-0061-17 STS 051	1971	<8,417	<0.0000268	8,400	NAD	NAD
M68503-021 JBP	2018-0060-54 JBP 097	1972	<5,918	<0.0000268	5,920	NAD	NAD
M68503-023 JBP	2018-0060-64 JBP107	1973	8,760	0.000017	8,730	<0.1 Anth	<0.1 Anth
M68503-028 STS	2018-0061-12 STS 046	1974	17,500	0.000098	5,800	NAD	<0.1 Anth
02D STS	20180061-02D STS 1611A	1975	<9,400	<0.0000268	9,400	P ³ -NAD	NAD
M69042-001 JBP	20180056-02D JBP 209	1975	22,400	0.000232	4,470	<0.1 Trem/Act <0.1 Anth	<0.1 Trem/Act
M68503-046 STS	2018-0061-57 STS 021	1975	<5,863	<0.0000268	5,900	NAD	NAD
M68503-042 STS	2018-0061-49 STS 013	1976	23,600	0.0024	5,890	<0.1 Trem/Act <0.1 Anth	<0.1 Trem/Act
M68233-001 JBP	2018-0015-01A1 JBP 084	1978	7,240	0.00001	7,240	<0.1 Trem/Act	<0.1 Trem/Act
M68233-002 JBP	2018-0015-01A2 JBP 084	1978	22,130	0.00023	7,400	<0.1 Trem/Act	<0.1 Trem/Act
M68503-057 JBP	2018-0070-10 2014.001.0612JBP	1977	8,360	0.000038	8,360	<0.1 Trem/Act <0.1 Anth	NAD
M68503-020 JBP	2018-0060-53 JBP 096	1978	34,800	0.000053	8,690	<0.1 Trem/Act <0.1 Anth	<0.1 Trem/Act
M69042-002 JBP	20180056-06 JBP 213	1978	63,800	0.00048	9,120	<0.1 Trem/Act <0.1 Anth	<0.1 Trem/Act <0.1 Anth
M69042-004 JBP	20180056-34 JBP 241	1978	18,000	0.000012	6,020	<0.1 Trem/Act <0.1 Anth	<0.1 Trem/Act <0.1 Anth
M69042-008 JBP	20180060-67 JBP 110	1978	18,100	0.00086	6,020	<0.1 Anth	<0.1 Anth
07D STS	20180070-07D 2014.001.0397	1978	82,000	0.00073	9,100	J ³ -NAD	0.2 Trem/Act 0.5 Anth
15D STS	20180061-15D STS 049	1978	61,000	0.0013	8,700	J ³ -NAD	0.3 Trem/Act
50D STS	20180061-50D STS 1605A	1978	<9,300	<0.0000268	9,300	J ³ -NAD	<0.1 Anth
M68503-059 JBP	2018-0070-16 JBP 2014.001.1363	1979	17,100	0.00024	8,560	<0.1 Trem/Act <0.1 Anth	<0.1 Trem/Act <0.1 Anth

NAD: No asbestos detected J³NAD: Samples analyzed by Lee Poye

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**M68503-023**

Str. #	Length (μm)	Width (μm)	Aspect Ratio	Structure Type	Asbestos Type
-1	12.0	0.8	15.0	Bundle	Anthophyllite

Average Aspect Ratio: 10.7

M68503-028

Str. #	Length (μm)	Width (μm)	Aspect Ratio	Structure Type	Asbestos Type
-1	18.8	1.8	10.4	Bundle	Anthophyllite
-2	5.7	0.4	14.3	Bundle	Anthophyllite
-3	6.0	0.9	6.7	Bundle	Anthophyllite

Average Aspect Ratio: 10.5

M69042-001

Str. #	Length (μm)	Width (μm)	Aspect Ratio	Structure Type	Asbestos Type
-1	14.4	0.4	36.0	Fiber	Anthophyllite
-2	2.3	0.4	5.8	Fiber	Anthophyllite
-3	15.7	2.0	7.9	Bundle	Anthophyllite
-4	10.0	0.2	50	Fiber	Anthophyllite
-5	22.5	2.5	9	Bundle	Anthophyllite

Average Aspect Ratio: 21.7

M68503-042

Str. #	Length (μm)	Width (μm)	Aspect Ratio	Structure Type	Asbestos Type
-1	19.0	2.0	9.5	Bundle	Anthophyllite
-2	29.0	2.0	14.5	Bundle	Anthophyllite
-3	6.7	0.8	8.4	Bundle	Anthophyllite
-4	40.0	6.0	6.7	Bundle	Anthophyllite

Average Aspect Ratio: 9.8

M68233-001

Str. #	Length (μm)	Width (μm)	Aspect Ratio	Structure Type	Asbestos Type
-1	6.8	0.9	7.6	Fiber	Anthophyllite

Average Aspect Ratio: 7.6

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**M68233-002**

Str. #	Length (μm)	Width (μm)	Aspect Ratio	Structure Type	Asbestos Type
-1	27.7	0.7	36.7	Bundle	Anthophyllite
-2	16.4	2.6	6.3	Bundle	Anthophyllite
-3	7.6	0.5	15.2	Fiber	Anthophyllite

Average Aspect Ratio: 19.4

M68503-057

Str. #	Length (μm)	Width (μm)	Aspect Ratio	Structure Type	Asbestos Type
-1	8.0	1.5	5.3	Bundle	Tremolite

Average Aspect Ratio: 5.3

M68503-020

Str. #	Length (μm)	Width (μm)	Aspect Ratio	Structure Type	Asbestos Type
-1	8.5	0.42	20.2	Bundle	Anthophyllite
-2	2.7	0.44	6.1	Bundle	Tremolite
-3	4.62	0.62	7.5	Bundle	Anthophyllite
-4	21.1	0.98	21.5	Bundle	Anthophyllite

Average Aspect Ratio: 13.8

M69042-002

Str. #	Length (μm)	Width (μm)	Aspect Ratio	Structure Type	Asbestos Type
-1	35.4	1.8	19.7	Bundle	Anthophyllite
-2	12.4	1.1	11.3	Bundle	Anthophyllite
-3	6.4	1.1	5.8	Bundle	Anthophyllite
-4	6.0	0.7	8.6	Bundle	Anthophyllite
-5	34.5	1.1	31.4	Bundle	Anthophyllite
-6	11.5	1.2	9.6	Bundle	Anthophyllite
-7	11.5	1.0	11.5	Bundle	Anthophyllite

Average Aspect Ratio: 14.0

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**M69042-004**

Str. #	Length (μm)	Width (μm)	Aspect Ratio	Structure Type	Asbestos Type
-1	13.4	0.4	33.5	Fiber	Anthophyllite
-2	4.2	0.38	11.1	Bundle	Anthophyllite
-3	13.4	0.63	21.3	Bundle	Anthophyllite

Average Aspect Ratio: 21.9

M69042-008

Str. #	Length (μm)	Width (μm)	Aspect Ratio	Structure Type	Asbestos Type
-1	3.9	0.5	7.8	Bundle	Anthophyllite
-2	7.8	1.5	5.2	Bundle	Anthophyllite
-3	5.3	0.5	10.6	Bundle	Anthophyllite

Average Aspect Ratio: 7.9

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**07D**

Str. #	Length (µm)	Width (µm)	Aspect Ratio	Structure Type	Asbestos Type
-1	3.5	0.25	14	Fiber	Anthophyllite
-2	6.0	0.4	15	Bundle	Anthophyllite
-3	7.5	0.2	37.5	Bundle	Anthophyllite
-4	11.0	0.6	18.3	Bundle	Anthophyllite
-5	4.0	0.25	16	Bundle	Anthophyllite
-6	14.0	1.1	12.7	Bundle	Anthophyllite
-7	8.5	0.4	21.3	Bundle	Anthophyllite
-8	9.0	0.7	12.9	Bundle	Anthophyllite

Average Aspect Ratio: 18.5

15D

Str. #	Length (µm)	Width (µm)	Aspect Ratio	Structure Type	Asbestos Type
-1	6.6	0.7	9.4	Bundle	Anthophyllite
-2	5.2	0.22	23.6	Bundle	Anthophyllite
-3	20.3	0.92	22.1	Bundle	Anthophyllite
-4	27.0	1.5	18	Bundle	Anthophyllite
-5	5.9	0.22	26.8	Fiber	Anthophyllite

Average Aspect Ratio: 20.0

M68503-059

Str. #	Length (µm)	Width (µm)	Aspect Ratio	Structure Type	Asbestos Type
-1	12.0	0.4	30.0	Bundle	Anthophyllite
-2	17.0	2.5	6.8	Bundle	Anthophyllite

Average Aspect Ratio: 18.4

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Table 4

**Summary of Results for Johnson & Johnson's
1980's Historical JBP & STS Samples**

MAS/J ³ Sample Number	Client Sample ID	Year of Mnfr.	Amphibole Asbestos Structures/g	Amphibole Asbestos wt. %	Analytical Sensitivity Structures/g	ISO PLM wt. %	Blount PLM wt. %
10D STS	20180061-10D STS 044	1980	N/A	N/A	N/A	J ³ -NAD	0.2 Tre/Act <0.1 Anth
38D STS	20180061-38D STS 002	1980	53,000	0.003	7,600	J ³ -NAD	0.2 Tre/Act 0.2 Anth
63D STS	20180061-63D STS 027D	1980-1981	N/A	N/A	N/A	J ³ -NAD	0.2 Tre/Act 0.2 Anth
52D STS	20180061-52D STS 016	1981	70,000	0.004	7,800	J ³ -NAD	0.2 Tre/Act 0.5 Anth
65D STS	20180061-65D STS 029	1981	95,000	0.0092	7,300	J ³ -NAD	0.2 Tre/Act 0.2 Anth
37D STS	20180061-37D STS 001	1982	9,300	0.00005	9,300	J ³ -NAD	<0.1 Tre/Act <0.1 Anth
45D STS	20180061-45D STS 009	1982	9,000	0.0019	9,000	J ³ -NAD	<0.1 Tre/Act
51D STS	20180061-51D STS 1606A	1982	<9,400	N/A	9,400	J ³ -NAD	<0.1 Tre/Act
66D STS	20180061-66D STS 1610A	1982	<9,400	N/A	9,400	J ³ -NAD	0.1 Tre/Act
21D STS	20180061-21D STS 1614A	1983	<8,300	N/A	8,300	J ³ -NAD	<0.1 Tre/Act <0.1 Anth
M68503- 001 JBP	2018-0051-34 JBP 294	1984	18,700	0.000036	6,240	<0.1Tre/Act	<0.1 Tre/Act
M69042- 010 JBP	2018-0070-86 2014.001.5102 JBP	1985	12,500	0.000035	6,200	<0.1Tre/Act	<0.1 Anth
31F STS	20180061-31F STS 065	1986	22,000	0.0029	7,300	J ³ -NAD	0.3 Tre/Act < 0.1 Anth
31G STS	20180061-31G STS 065	1986	30,000	0.00052	7,500	J ³ -NAD	0.7 Tre/Act
M69751- 037 Imerys	20180314-03 Imerys	1989	59,000	0.000089	4500	<0.1 Tre/Act	<0.1 Tre/Act <0.1 Anth

NAD: no asbestos detected. J³NAD: Samples analyzed by Lee Poye.

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**38D**

Str. #	Length (μm)	Width (μm)	Aspect Ratio	Structure Type	Asbestos Type
-1	3.2	0.6	5.3	Bundle	Anthophyllite
-2	3.6	0.7	5.1	Bundle	Anthophyllite
-3	18.9	1.5	12.6	Bundle	Anthophyllite
-4	6.0	0.9	6.7	Bundle	Anthophyllite
-5	6.2	1.1	5.6	Bundle	Anthophyllite
-6	3.5	0.4	8.9	Fiber	Anthophyllite
-7	6.0	0.3	20.0	Bundle	Anthophyllite
-8	3.1	0.25	12.4	Bundle	Anthophyllite

Average Aspect Ratio: 9.6

52D

Str. #	Length (μm)	Width (μm)	Aspect Ratio	Structure Type	Asbestos Type
-1	46.5	1.5	31	Bundle	Anthophyllite
-2	29.2	1.5	19.5	Bundle	Anthophyllite
-3	10.0	0.5	20	Bundle	Anthophyllite
-4	22.5	1.3	17.3	Bundle	Anthophyllite
-5	11.7	1.0	11.7	Bundle	Anthophyllite
-6	9.5	1.0	N/A	Bundle	Talc
-7	31.0	1.0	31	Bundle	Anthophyllite
-8	9.0	0.25	36	Fiber	Anthophyllite
-9	3.8	0.3	12.7	Bundle	Anthophyllite

Average Aspect Ratio: 22.4

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**65D**

Str. #	Length (µm)	Width (µm)	Aspect Ratio	Structure Type	Asbestos Type
-1	18.0	1.5	12	Bundle	Anthophyllite
-2	14.3	1.5	9.5	Bundle	Anthophyllite
-3	20.2	1.3	15.5	Bundle	Anthophyllite
-4	11.2	0.7	16	Bundle	Anthophyllite
-5	6.8	0.7	9.7	Bundle	Anthophyllite
-6	13.3	0.7	19	Bundle	Anthophyllite
-7	22.3	1.5	14.9	Bundle	Anthophyllite
-8	17.0	0.22	77.3	Fiber	Anthophyllite
-9	28.0	2.5	11.2	Bundle	Anthophyllite
-10	9.5	1.3	7.3	Bundle	Anthophyllite
-11	12.0	0.8	15	Bundle	Anthophyllite
-12	10.2	0.4	25.5	Bundle	Anthophyllite
-13	23.0	3.5	6.6	Bundle	Anthophyllite

Average Aspect Ratio: 18.4

37D

Str. #	Length (µm)	Width (µm)	Aspect Ratio	Structure Type	Asbestos Type
-1	15.8	2.6	6.1	Bundle	Anthophyllite

Average Aspect Ratio: 6.1

45D

Str. #	Length (µm)	Width (µm)	Aspect Ratio	Structure Type	Asbestos Type
-1	17.5	2.2	8.0	Bundle	Anthophyllite

Average Aspect Ratio: 8.0

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**M68503-001**

Str. #	Length (µm)	Width (µm)	Aspect Ratio	Structure Type	Asbestos Type
-1	9.89	0.46	21.5	Bundle	Anthophyllite
-2	3.2	0.59	5.4	Bundle	Tremolite
-3	10.4	1.38	7.5	Bundle	Tremolite

Average Aspect Ratio: 11.5

M69042-010

Str. #	Length (µm)	Width (µm)	Aspect Ratio	Structure Type	Asbestos Type
-1	9.2	1.5	6.1	Bundle	Anthophyllite
-2	8.9	0.42	21.2	Bundle	Anthophyllite

Average Aspect Ratio: 11.5

31F

Str. #	Length (µm)	Width (µm)	Aspect Ratio	Structure Type	Asbestos Type
-1	21.6	1.3	16.6	Bundle	Anthophyllite

Average Aspect Ratio: 16.6

31G

Str. #	Length (µm)	Width (µm)	Aspect Ratio	Structure Type	Asbestos Type
-1	30.1	0.7	43	Bundle	Anthophyllite
-2	13.5	0.7	19.3	Bundle	Anthophyllite
-3	7.0	0.7	10	Bundle	Anthophyllite
-4	22.5	1.5	15	Bundle	Anthophyllite

Average Aspect Ratio: 21.8

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Table 5
Summary of Results for Johnson & Johnson's
1990's Historical JBP & Imerys Samples

MAS/J ³ Sample Number	Client Sample ID	Year of Mnfr.	Amphibole Asbestos Structures/g	Amphibole Asbestos wt. %	Analytical Sensitivity Structures/g	ISO PLM wt. %	Blount PLM wt. %
M69757-005	20180343-03A Imerys	1990	27000	0.000010	4500	<0.1 Tre/Act <0.1 Anth	<0.1 Tre/Act <0.1 Anth
M69757-007	20180358-01A Imerys	1990	39000	0.00030	4300	<0.1 Tre/Act	<0.1 Tre/Act <0.1 Anth
M69751-039	20180320-01A Imerys	1991	<4400	<0.0000268	4400	NAD	NAD
M69751-040	20180320-13A Imerys	1991	13000	0.000015	4500	NAD	<0.1 Tre/Act
M68503-016 JBP	2018-0060-33 JBP 001	1994	<9000	<0.0000268	9000	NAD	NAD
M69757-004	20180339-05A Imerys	1994	<4400	<0.0000268	<4400	NAD	NAD
M69751-036	20180313-02A Imerys	1995	4400	0.00000022	4400	NAD	NAD
M68503-017 JBP	2018-0060-38 JBP 006	1996	<9000	<0.0000268	9000	NAD	NAD
M69757-006	20180344-04A Imerys	1996	<4400	<0.0000268	4400	NAD	NAD
M69751-002	20180315-021A Imerys	1999	<4400	<0.0000268	4400	NAD	NAD

NAD: no asbestos detected.

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**M69757-005**

Str. #	Length (μm)	Width (μm)	Aspect Ratio	Structure Type	Asbestos Type
-1	2.32	0.21	11.0	Bundle	Anthophyllite
-2	6.1	0.42	14.5	Bundle	Anthophyllite
-3	4.4	0.84	5.2	Bundle	Anthophyllite
-4	2.72	0.42	6.5	Bundle	Anthophyllite
-5	8.7	0.38	22.9	Bundle	Anthophyllite
-6	4.82	0.76	6.3	Bundle	Anthophyllite

Average Aspect Ratio: 11.1

M69757-007

Str. #	Length (μm)	Width (μm)	Aspect Ratio	Structure Type	Asbestos Type
-1	5.6	1.1	5.1	Bundle	Anthophyllite
-2	4.6	0.64	7.2	Bundle	Anthophyllite
-3	9.9	0.36	27.5	Fiber	Anthophyllite
-4	10.9	0.35	31.1	Bundle	Anthophyllite
-5	11.7	1.4	8.4	Bundle	Anthophyllite
-6	11.6	1.1	10.5	Bundle	Actinolite
-7	11.8	1.6	7.4	Bundle	Anthophyllite
-8	8	1.3	6.2	Bundle	Anthophyllite
-9	49.4	2.1	23.5	Bundle	Talc-Anth

Average Aspect Ratio: 11.1

M69751-040

Str. #	Length (μm)	Width (μm)	Aspect Ratio	Structure Type	Asbestos Type
-1	7.4	0.62	11.9	Bundle	Anthophyllite
-2	14.9	0.74	20.1	Bundle	Anthophyllite
-3	6.72	0.62	10.8	Bundle	Anthophyllite

Average Aspect Ratio: 11.1

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**M69751-036**

Str. #	Length (µm)	Width (µm)	Aspect Ratio	Structure Type	Asbestos Type
-1	6.3	0.18	35.0	Bundle	Tremolite

Average Aspect Ratio: 35.0

Table 6
Summary of Results for Johnson & Johnson's
2000's Historical Imerys Samples

MAS/J ³ Sample Number	Client Sample ID	Year of Mnfr.	Amphibol e Asbestos Structures /g	Amphibole Asbestos wt. %	Analytical Sensitivity Structures/g	ISO PLM wt. %	Blount PLM wt. %
M69751-001	2018-0315-01A	2001-2002	4400	0.000017	4400	NAD	NAD
M69751-006	2018-0316-020A	2000	4600	0.0000024	4600	NAD	<0.1 Tre/Act
M69751-007	2018-0316-021A	2000	8700	0.000024	4300	NAD	NAD
M69751-038	2018-0317-04A	2000	<4400	<0.0000268	4400	NAD	NAD
M69751-004	2018-0315-040A	2001	<4300	<0.0000268	4300	NAD	NAD
M69751-008	2018-0316-022A	2003	<4400	<0.0000268	4400	NAD	NAD

NAD: no asbestos detected.

M69751-001

Str. #	Length (µm)	Width (µm)	Aspect Ratio	Structure Type	Asbestos Type
-1	10.5	1.2	8.8	Bundle	Tremolite

Average Aspect Ratio: 8.8

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**M69751-006**

Str. #	Length (μm)	Width (μm)	Aspect Ratio	Structure Type	Asbestos Type
-1	8.2	0.5	16.4	Bundle	Tremolite

Average Aspect Ratio: 35.0

M69751-007

Str. #	Length (μm)	Width (μm)	Aspect Ratio	Structure Type	Asbestos Type
-1	16.0	1	16.0	Bundle	Tremolite
-2	7.6	0.9	8.4	Bundle	Tremolite

Average Aspect Ratio: 12.2

Table 7
Summary of J³ XRD & PLM Analysis
Asian

MAS Sample Number	Date of Manuf.	ISO XRD
M69248-001	N/A	NAD
M69248-002	1979	inconclusive
M69248-003	1980-1984	positive
M69248-004	N/A	NAD
M69248-005	N/A	NAD
M69248-006	1982	NAD
M69248-007	N/A	positive

NAD: no asbestos detected N/A: dates of manufacture not provided by J&J

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Table 8
Summary of J³ XRD & PLM Analysis
1960's

MAS Sample Number	Date of Manuf.	ISO XRD	J3 ISO PLM %	MAS ISO PLM %
M68503-010	1960	NAD	NAD	NAD
M68503-009	1962	NAD	NAD	NAD
M68508-024	1963	NAD	NAD	NAD
M68503-004	1964	NAD	NAD	<0.1 Trem/Act
M68503-014	1965	NAD	NAD	NAD
M68503-011	1966	NAD	NAD	NAD
M68503-027	1966	NAD	NAD	NAD
M69042-007	1966-1967	NAD	---	NAD
M69042-003	1967	NAD	---	NAD
M69042-005	1967	NAD	---	NAD
M69042-006	1967	NAD	---	NAD
M68503-019	1967	NAD	NAD	NAD
M68503-038	1968	NAD	NAD	NAD
M68503-026	1969	NAD	NAD	<0.1 Trem/Act

NAD: no asbestos detected

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Summary of J³ XRD & J³/ MAS PLM Analysis

1970's

MAS Sample Number	Date of Manuf.	ISO XRD	J3 ISO PLM %	MAS ISO PLM %
M68503-005	1970	NAD	NAD	NAD
M69042-009	1970	NAD	---*	<0.1 Trem/Act
M68503-029	1971	NAD	NAD	NAD
M68503-021	1972	NAD	NAD	NAD
M68503-023	1973	NAD	NAD	<0.1 Anth.
M68503-028	1974	NAD	NAD	NAD
02D	1975	NAD	NAD	---
M69042-001	1975	NAD	---	<0.1 Trem/Act <0.1 Anth
M68503-046	1975	NAD	NAD	NAD
M68503-042	1976	NAD	NAD	<0.1 Trem/Act <0.1 Anth
M68233-001	1978	NAD	—	<0.1 Trem/Act
M68233-002	1978	NAD	—	<0.1 Trem/Act
M68503-057	1978	NAD	NAD	<0.1 Trem/Act <0.1 Anth
M68503-020	1978	NAD	NAD	<0.1 Anth
M69042-002	1978	NAD	---	<0.1 Trem/Act <0.1 Anth
M69042-004	1978	NAD	—	<0.1 Trem/Act <0.1 Anth
M69042-008	1978	NAD	---	<0.1 Anth
07D	1978	NAD	NAD	--
15D	1978	NAD	NAD	--
50D	1978	NAD	NAD	--
M68503-059	1979	NAD	NAD	<0.1 Trem/Act <0.1 Anth

NAD: no asbestos detected *: not analyzed

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Summary of J³ XRD & PLM Analysis

1980's

MAS/P ³ Sample Number	Date of Manuf.	ISO XRD	J3 ISO PLM	MAS ISO PLM
10D	1980	NAD	NAD	--*
38D	1980	NAD	NAD	--
63D	1980-1981	NAD	NAD	--
52D	1981	NAD	NAD	--
65D	1981	NAD	NAD	--
37D	1982	NAD	NAD	--
45D	1982	NAD	NAD	--
51D	1982	NAD	NAD	--
66D	1982	NAD	NAD	--
21D	1983	NAD	NAD	--
M68503-001	1984	NAD	NAD	<0.1% Trem/Act
M69042-010	1985	NAD	---	<0.1% Trem/Act
31F	1986	NAD	NAD	--
31G	1986	NAD	NAD	--

NAD: no asbestos detected, *: not analyzed

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Summary of J³ XRD Analysis

1990's

MAS Sample Number	Date of Manuf.	ISO XRD
M69757-005	1990	N/A
M69757-007	1990	N/A
M69751-039	1991	N/A
M69751-040	1991	N/A
M68503-016	1994	NAD
M69757-004	1994	N/A
M69751-036	1995	N/A
M68503-017	1996	NAD
M69757-006	1996	N/A
M69751-002	1999	N/A

NAD: no asbestos detected N/A: Sample not analyzed

Summary of J³ XRD Analysis

Early 2000's

MAS Sample Number	Date of Manuf.	ISO XRD
M69751-005	2000	N/A
M69751-007	2000	N/A
M69751-039	2000	N/A
M69751-040	2000	N/A
M69751-004	2001	N/A
M69751-036	2001	N/A

N/A: not analyzed

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Table 9

Occurrence of Fibrous Talc in Historical J&J Cosmetic Talcum Powders

1960's

Sample #	Date of Manufacture	TEM Analysis F.T	Talc Fibers per gram	ISO22262-1 PLM Analysis
M68503-010	1960	Trace	852,000	Trace
M68503-009	1962	Trace	882,000	Trace
M68503-024	1963	Trace	896,000	Trace
M68503-004	1964	Trace	298,000	Trace
M68503-014	1965	Trace	864,000	Trace
M68503-027	1966	Trace	290,000	Trace
M68503-011	1967	NSD	N/A	Trace
M68503-019	1967	Trace	892,000	Trace
M69042-003	1967	Trace	890,000	Moderate
M69042-005	1967	Trace	873,000	Moderate
M69042-006	1967	NSD	N/A	Moderate
M69042-007	1967	NSD	N/A	Moderate
M68503-038	1968	Trace	304,000	Trace
M68503-026	1969	Trace	864,000	Trace

N/A: Not applicable, fibrous talc calculations not possible

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**1970's**

Sample #	Date of Manufacture	TEM Analysis F.T	Talc Fibers per gram	ISO22262-1 PLM Analysis
M68503-005	1970	Trace	877,000	Trace
M69042-009	1970	Trace	637,000	Moderate
M68503-029	1971	Trace	1,020,000	Trace
M68503-021	1972	NSD	N/A	Trace
M68503-023	1973	Trace	876,000	Trace
M68503-028	1974	NSD	N/A	Trace
02D	1975	1 Fiber*	N/A	N/A
M69042-001	1975	NSD	N/A	N/A
M68503-046	1975	NSD	N/A	Trace
M68503-042	1976	NSD	N/A	Trace
M68233-001	1978	NSD	N/A	Trace
M68233-002	1978	Trace	735,00	Trace
M68503-057	1977	NSD	N/A	Trace
M68503-020	1978	Trace	868,000	Trace
M69042-002	1978	Trace	890,000	Moderate
M69042-004	1978	Trace	603,000	Moderate
M69042-008	1978	NSD	N/A	Moderate
07D	1978	1 Fiber	N/A	NSD
15D	1978	None reported	N/A	NSD
50D	1978	3 Fibers	N/A	NSD
M68503-059	1979	Trace	855,000	Trace

*No criteria provide by P³ for fibrous talc estimation. N/A: Not applicable, fibrous talc calculations not possible

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1980's

Sample #	Date of Manufacture	TEM Analysis F.T	Talc Fibers per gram	ISO22262-1 PLM Analysis
38D	1980	None Reported	N/A	N/A
52D	1981	None Reported	N/A	N/A
65D	1981	None Reported	N/A	N/A
37D	1982	2 Fibers*	N/A	N/A
45D	1982	3 Fibers	N/A	N/A
51D	1982	None Reported	N/A	N/A
66D	1982	None Reported	N/A	N/A
21D	1983	1 Fiber	N/A	N/A
M68503-001	1984	Trace	624,000	Trace
M69042-010	1985	Trace	624,000	Moderate
31F	1986	1 Fiber	N/A	N/A
31G	1986	2 Fibers	N/A	N/A
M69751-037	1989	Trace	548,000	Moderate

*No criteria provide by P³ for fibrous talc estimation. N/A: Not applicable, fibrous talc calculations not possible

1990's

Sample #	Date of Manufacture	TEM Analysis F.T	Talc Fibers Per gram	ISO22262-1 PLM Analysis
M69757-005	1990	Trace	434,000	Moderate
M69757-007	1990	Trace	478,000	Moderate
M69751-039	1991	Trace	497,000	Moderate
M69751-040	1991	Trace	451,000	Moderate
M68503-016	1994	Trace	898,000	Trace
M69757-004	1994	Trace	403,000	Trace
M69751-036	1995	Trace	438,000	Moderate
M68503-017	1996	Trace	895,000	Trace
M69757-006	1996	Trace	439,000	Moderate
M69751-002	1999	NSD	N/A	Moderate

N/A: Not applicable, fibrous talc calculations not possible

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Early 2000's

Sample #	Date of Manufacture	TEM Analysis F.T	Talc Fibers Per gram	ISO22262-1 PLM Analysis
M69751-001	2000	Trace	471,000	Moderate
M69751-006	2000	Trace	439,000	Trace
M69751-007	2000	Trace	458,000	Trace
M69571-038	2000	Trace	437,000	Moderate
M69751-004	2001	Trace	434,000	Moderate
M69751-008	2003	NSD	N/A	Trace

N/A: Not applicable, fibrous talc calculations not possible

Asian

Sample #	Date of Manufacture	TEM Analysis F.T	Talc Fibers per gram	ISO22262-1 PLM Analysis
M69248-001	Unknown*	Trace	577,000	Trace
M69248-002	1979	Trace	582,000	Trace
M69248-003	1980-1984	Trace	930,000	Trace
M69248-004	unknown	Trace	860,000	Trace
M69248-005	unknown	Trace	870,000	Trace
M69248-006	1982	NSD	N/A	Trace
M69248-007	unknown	NSD	N/A	Trace

*J&J did not provide date of manufacture. N/A: Not applicable, fibrous talc calculations not possible

Exhibit 27

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**4th Supplemental MDL Report****Analysis of Non-Historical J&J's Talcum Powder Consumer Product
Containers and J&J Chinese Historical Talc Retain Samples**

Anthophyllite Bundle 1967

William E. Longo, Ph.D., CEO

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April 29, 2024

4th MDL Supplemental Report

This supplemental report contains the following new information obtained by MAS since the 2nd & 3rd Supplement MDL Reports were issued on February 1, 2019 and November 17, 2023. This supplemental report was issued to fix typographical errors.

Also, when the last MDL report was issued, MAS was not analyzing cosmetic talc samples for chrysotile using the heavy liquid separation (HLS) sample preparation method. After reviewing the Colorado School of Mines (CSM) protocol for the analysis of chrysotile using a HLS sample preparation method with PLM analysis, MAS worked on developing a more efficient protocol for the detection of chrysotile in cosmetic talc samples. The Colorado School of Mines developed this

MAS has analyzed 40 JBP containers that were all manufactured with J&J's Chinese talc source. MAS has also analyzed 11 J&J Chinese talc retains along with two additional JBP Vermont sourced talc containers.

All additional J&J talcum powder product analysis Reports have been previously provided to defense council on behalf of J&J, and I have been questioned by J&J defense council on all of these sample analysis reports during numerous depositions. These Reports provide all of the sample chain-of-custodies, the analytical protocols used for that particular set of samples and results.

Therefore, this Supplement report will only contain the results for the 43 additional analyses that were performed after our last MDL Supplement Report was issued on February 1, 2019.

J&J Vermont Talc Source

Table 1 provides the J&J sample information and analytical results for the three JBP containers where talcum powder was sourced from Vermont.

J&J Chinese Talc Source

The overall results show that out of the 43 J&J talcum powder samples analyzed that contained Chinese sourced talc, 40 or 93% were positive for either amphibole asbestos and or chrysotile. As discussed above, the Reports for 41 of the 43 JBP and Shower to Shower sample sets have been provided to J&J, and those reports will contain the full methodology used for each set of

sample analysis. Therefore, there was not any reason to duplicate the methodology here in this report.

Besides J&J talcum powder container samples, MAS also received 11 Chinese retained talc samples that consisted of two Imerys retains and nine J&J retains. The results of these 11 samples are shown in Table 7. Tables 1` thru 7 can be found at the end of this report.

All 11 of the China Guangxi Providence talc sourced sample retains were found to be positive for chrysotile asbestos at a concentration that ranged from 0.0008% to 0.002%. For the 42 Chinese sourced J&J talcum powder products and 11 retain samples, a total of 50 samples were positive for asbestos out of the 53 samples (94%).

DISCUSSION/CONCLUSION

Colorado School of Mines (w HLS) Sample Preparation of Cosmetic Talc

This section reviews the development of the double density cosmetic talc sample preparation method, by the CSM, on behalf of J&J, for the concentration of chrysotile and amphibole asbestos in talc samples.

The sample preparation part of the MAS chrysotile analysis is based on the work done by the CSM in the early 1970's for the detection specifically of possible chrysotile and amphibole asbestos in J&J sourced Vermont talcum powder, from the Frostbite mine, using double heavy liquid separation (<2.9 g/cc & >2.9 g/cc).

An overview of this method development by CSM is as follows:

A January 17, 1973 Windsor Minerals document sent by R.N. Miller to Mr. Bill Ashton of J&J, subject: "Core samples, diamond drill holes, **Frostbite mine**" informs Bill Ashton that Windsor Minerals was sending 1/8 split of retain samples from the cosmetic ore sampling done in these holes. The memo goes on to say, "This is the material which was sent to Colorado identified as CN core and on which we conducted our pilot production runs which yielded Grade 66 material." (JNJ 000682638)

Cosmetic Talc Core Samples mailed to CSM:

Hole Numbers

1. 30-71-S 4. 32-71-S
2. 30-B-71-S 5. 34-71-S
3. 30-C-71-S

February 26, 1973 CSM document for, Project no. C10704, reported their analysis to W.H. Ashton, where these same five Frostbite core samples were prepared with heavy liquid separation (HLS) with two different densities (<2.9 & >2.9) and with acid leaching. (JNJNL61_000008084 thru JNJNL61_000008089). The “as received samples” were first analyzed using x-ray diffraction and microscopic studies without HLS.

The results stated that “Relative to possible asbestos type minerals, samples **30-71-S and 30-B-71-S contain slight traces of tremolite-actinolite minerals. Sample 32-71-S is suspected to contain a very minor amount of serpentine which maybe chrysotile.**

As further outlined in the 1973 Report, the next phase of study was that the 5 Frostbite talc ore samples were first fractionated using HLS and then with acid dissolution, then analyzed by XRD. The report describes the HLS method as follows: Each of the ground talc ore was separated into fractions by centrifugation in heavy liquids: specific gravity <2.90 and specific gravity >2.90. After the x-ray diffraction of the >2.90 specific gravity fractions, the sample was leached with 1:1 HCL to remove magnesite. The insoluble residue was then examined for amphiboles with a petrographic microscope. In both Phase 1 and Phase 2, possible serpentine was detected in Frostbite ground talc ore sample 32-71-S.

In the last phase of this analysis, CSM attempted to verify the presence of serpentine in sample 32-71-S <2.65 fraction by step scan x-ray diffraction over the critical diffraction peaks of serpentine which is in the 7Å and 14Å region. The initial result suggested that serpentine, not chlorite, was present.

Microscopic examination of the <2.65 fraction identified a very minor (1%) amounts of possible serpentine fibers that was facilitated by staining with 1% iodine in glycerin.

The report recommended that further work be done on this sample (32-71-S). It has been suggested in the past by some that this statement meant that more work was needed on the heavy liquid separation sample preparation method. That suggestion is not true.

The April 2, 1973 CSM document for Project no. C10704, reported their analysis to W.H. Ashton, where the primary objective of the studies was to determine the presence or absence of tremolite and chrysotile in talc bearing head samples labeled 1 through 4.

For the HLS sample preparation and analysis, by CSM, the four head talc ore samples were first ground into two size ranges of minus 200 plus 325 and minus 325. The samples were then prepared with CSM’s double heavy liquid separation method and acid dissolution, analyzed by XRD and or optical microscopy. For optical microscopy of tremolite analysis, RI fluid 1.600 was used for their PLM analysis of the tremolite asbestos. MAS has been criticized in the past for using 1.605 RI fluid because it was not high enough as suggested by J&J’s experts, even though the CSM used 1.600 RI fluid which is a lower RI fluid.

Results:

Chrysotile (HLS <2.65 g/cc)

- 1) **Minus 200 plus 325 mesh:** Chrysotile abundance was estimated as <0.0001% in sample 3 and <0.0006% for sample 4.
- 2) **Plus 325 mesh:** Chrysotile abundance was estimated as <0.0007% in samples 2, 3 and <0.0006% for sample 4.

Tremolite (HLS >2.90 g/cc)

- 1) **Minus 200 plus 325 mesh:** possible tremolite was found in sample 2 estimated at <0.002%
- 2) **Minus 325 mesh:** No tremolite was detected in any of the four samples.

These four samples were labeled “head” samples, which defined as average grade feed that goes into the mill before the flotation process. There was no identification of the source of the talc samples in the April 2, 1973 Report. However, it is most likely these head samples were collected in the same area that sample 32-71-S was collected from the Frostbite mine so “that further work be done on this sample 32-71-S”.

It would seem reasonable to conclude that the next set of talc samples analyzed was fulfilling that further work statement about Frostbite sample 32-71-S. Also, there were only 36 days between the CSM February and April reports, and all three of these reports have the same CSM Project no. C10704.

December 27, 1973: CSM prepared the following report for Johnson & Johnson, “A Procedure to Examine Talc for the Presence of Chrysotile and Tremolite-Actinolite Fibers for Project C10704”. (JNJ 000268037 to 045).¹

This CSM report provides the methodology using double density heavy liquid separation for chrysotile and amphibole asbestos. It reports a detection limit of 10 ppm (0.00001%) and verification of asbestos types, after separation, was done by optical microscopy.

This also stated the following: Electron Microscopy (EM) examination employing selected area electron diffraction and/or x-ray emission spectrography may be required in order to specifically identify small fibrous particulates; CSM recognized that EM would be needed to identify for small particles.

¹ December 27, 1973, Colorado School of Mines protocol entitled “A procedure to Examine Talc for the Presence of Chrysotile and Tremolite-Actinolite Fibers” Herman Ponder Director, Jerry Krause Senior Scientist and James Link Director Mining Division.

Nowhere in this report was there even a suggestion by the CSM that their double density heavy liquid method for sample preparation, for both chrysotile and amphibole asbestos, was anything but a sound scientific method.

In fact, this sample preparation was approved and signed off by the following individuals from the Colorado School of Mines Research Institute: Herman Ponder, Director, James M. Link, Director Mining Division, and Jerry Krause, Senior Scientist Mining Division.

In the Introduction Section, the second paragraph states the Following;

*the impurity level becomes very low ($<<1\%$), it is necessary to examine amounts of sample in order to detect the impurity. **As a result of the requirement to detect the proverbial "needle in a haystack,"** we have evolved a procedure which preconcentrates the impurities prior to examination. The net effect is that a large initial sample is fractioned in order to reject the majority from further examination.*

This was one of the reasons that MAS decided to use heavy liquid separation in late 2020 for cosmetic talc analysis as described above by the CSM method.

Johns-Manville

Another indication of how confident the CSM was in their double density separation method is that they informed Johns-Manville that they thought this heavy liquid separation method they developed, was good enough to be considered for a patent (JNJMX68_000007044 to 000007046).

In an October 29, 1973 letter from V.E Wolkodoff of Johns-Manville to Mr. Caneer, Colorado School of Mines, in response to a phone call from Mr. Caneer, Mr. Wolkodoff writes the following:

"Specifically, we were interested in your advanced technology used to separate felted masses of asbestos by heavy liquid separation preparatory to staining of chrysotile by iodine as worked out by Morton and Baker of Johns-Manville".

Mr. Wolkodoff further writes, *"I understand your position completely on specific techniques being worked for other companies which are proprietary and, as you had indicated, will probably be patented."*

This letter confirms CSM was both developing this sample preparation method for J&J and thought it was such an advancement in talc sample preparation technology for PLM analysis, they were considering to protect it with a patent.²

² October 29, 1973 letter from V.E Wolkodoff of Johns-Manville to Mr. Caneer, Colorado School of Mines.

With that said, I have seen no indication or documents that J&J's CSM double density talcum powder sample preparation method was ever patented, or shared with the FDA when they struggled with their own development of a concentration method, or over a period of 50 to 60 years, there is no evidence that J&J ever had their main outside QA labs (McCrone or the R.J. Lee Group) use the much superior CSM sample preparation method when they were analyzing J&J's talcum powder by XRD, PLM and or TEM for asbestos. The lack of use of the CSM sample preparation method by these two outside labs, explains why hundreds, if not thousands of J&J's talc sample analyses for asbestos were found to be non-detects by the McCrone and RJ Lee labs.

I believe the reason that the CSM talc sample concentration preparation method for chrysotile and amphibole asbestos was never adopted by the talc and cosmetic industries can be summed up by the following statements by Dr. Robert Rolle of J&J in two documents. The first document is a May 22, 1973 Report entitled Proposed Specs for Analyzing Talc for Asbestos. On the third page concerning Dr. Pooley's preconcentration method for tremolite, Dr. Rolle states, "This technique has not been written up yet, but evidently when applied to Vermont talc, 0.5% of the tremolite-type is found." Dr. Nashed of J&J received this report on May 23, 1973 (JNJA256_000001892 to 1989)³

"The limitation of this method is that it may be too sensitive."

The second document is a February 18th, 1975 memo to Dr. Rolle where he states, "I have also enclosed our test method for the proposed Xray technique which was drawn up by Boots Ltd in conjunction with Dr. Pooley" (JNJNL61_000062953)⁴

"We deliberately have not included a concentration technique as we felt it would not be in worldwide company interest to do this."

Other Asbestos Concentration Methods for Cosmetic Talc Yardley LTD. Method

A J&J produced document JNJ00026450 to 4509 redacted) that also has a Bate stamp number DX8011.0010 to .0010 un-redacted) entitled "A Method for the Separation of Impurities from Talc", is a double density separation sample preparation method that is very similar to the CSM double density sample preparation method. The primary differences involves the density for the heavy liquid that was used. Where the CSM method uses 2.65 g/cc for the chrysotile and >2.90 g/cc for the amphibole asbestos, the Yardley method uses 2.69 g/cc for chrysotile and 2.83 g/cc for amphibole asbestos. Also, the Yardley method uses a centrifuge speed of 3,000 rpm for 5 minutes, the CSM method uses a centrifuge speed of 800 rpm for two intervals of 30

³ May 22, 1973 Report where the Subject, entitled "Proposed Specs for Analyzing Talc For Asbestos".

⁴ February 18th, 1975 memo to Dr. Rolle.

minutes. The 1991 published Blount⁵ sample preparation method for amphibole asbestos, uses 2.81 g/cc and a centrifuge speed of 7,000 rpm for 10 minutes.

Each of these heavy liquid separation methods are using slightly different density liquids and different centrifuge speeds and times. The main point of this is that scientists are apparently using different densities and centrifugation times in an effort to increase analytical sensitivity. There is no right or wrong, the only thing important is that heavy liquid separation of asbestos from talcum powder is a well-researched method developed by J&J almost 50 years ago, published by Dr. Blount in 1990/91, and is also an International Standards Organization protocol (ISO 22262-1 &2) method, as well as used by the New York Environmental Laboratory Accreditation Program.

Physical Prosperities of Tremolite & Anthophyllite

In the December 27, 1973 CSM Research report, it is noteworthy that tremolite was detected in the minus 200 plus 325 samples, but not in the minus 325. These findings are consistent with the Pang et al. publication in 1987.⁶ For this study, they spiked talc with tremolite (1.0% and 0.1%) and ground these samples for two size ranges: 1) 50% was minus 325 and 2) 100% minus 325.

The results showed that for the TEM analysis (100 grid openings) the 1% spiked tremolite sample, at 50% minus 325, the number of tremolite fibers detected was 1,592, and for the 100% minus 325, the number of tremolite fibers was reduced to 91 structures or 5% detected.

For the 0.1 wt. percent, for the TEM analysis (100 grid openings) the 0.1 % tremolite spiked sample at 50% minus 325, the number of tremolite fibers detected was 88 and for the 100% minus 325, the number of tremolite fibers was reduced to 0 structures detected.

What is important about this study is first that the tremolite used was characterized by the authors as tremolite asbestos/asbestiform due to the aspect ratio. Second, the asbestos fibers/talc spiked samples were ground so that there were two different particle size populations for two sample sets 1st set, 50% of the sample would pass through a 325 mesh per inch sieve (45 µm opening), 2nd set, 100% of the sample would pass through the 325 mesh.

The Pang publication showed that when the talc was ground to the point that the size of the talc particles was small enough that 100% of the powder went through a 325 mesh, it either greatly reduced (1.0% spiked sample) or eliminated (0.1%) which is consistent with what CSM reported to J&J in their April 2, 1973 Protocol.

⁵ Blount, A.M. "Amphibole Content of Cosmetic and Pharmaceutical Talcs", Environmental Health Perspectives, Vol. 94, pp. 225-230, 1991

⁶ Thomas W.S. Pang, et al., "Determination of tremolite Asbestos in Talc Powder Samples" Ann. Occup. Hyg., Vol. 31, No. 2, pp 219-225, 1987.

The reason for the tremolite asbestos being ground up is due the physical properties of tremolite asbestos, as well as anthophyllite asbestos, where both tremolite and anthophyllite have low tensile strengths (brittle), not flexible like chrysotile, and to a lesser degree, amosite and crocidolite.⁷ Since tremolite asbestos is brittle, the grinding to a minus 325 mesh size, by both the CSM and the Pang research, simply broke the tremolite fibers/bundles into particles.

The CSM results also showed that chrysotile was not affected when ground to a minus 325 mesh size because chrysotile has high tensile strength, good flexibility and is the reason that most all asbestos-containing cloth is woven out of chrysotile and not ever from tremolite or anthophyllite asbestos. However, the size and width of the chrysotile bundles may be affected in the milling operation, and that would account for the 5 to 20 µm in length to 2 to 4 µm in width range that we see in the cosmetic talcs, as well as the UCC SG-210 chrysotile.

Additionally, this data suggests that that cosmetic talc being milled to either a minus 200, and in some cases, a minus 325, is lowering the tremolite and or anthophyllite concentrations in the talcum powder, unless the concentration is so high in the talc ore, that a significant amount of the amphibole asbestos survives the milling process as demonstrated with the MDL samples in our 2019 report, as well as for the samples reported here, that were positive for either tremolite or anthophyllite.

The Pang study clearly shows that milling talc to either minus 200 or minus 325 sieve size greatly reduces the amount fibrous tremolite asbestos detected by TEM, which would also have an effect on the amount detected by PLM.

For many years the Cosmetic, Toiletry Fragrance Association (CTFA) J4-1 method for the detection of asbestiform amphibole minerals (tremolite or anthophyllite) in cosmetic talc first, by XRD and if the talcum powder sample is negative for either tremolite and or anthophyllite, the analysis is stopped, and the sample declared as not to contain asbestos. On the other hand, if the sample is positive by XRD, then the sample is analyzed by PLM to determine if the tremolite or anthophyllite is positive.

The J4-1 sample preparation method for PLM is located on page 10 at Note 1, and states the following: "Talc to be analyzed and the tremolite used to prepare standard samples must be finer than 325 mesh (maximum particle size of 44 microns)." The Tekmar Analytical Mill (Model A-10) is recommended in the method section.

Since the J4-1 PLM method requires that 100% talc sample be milled to a minus 325 sieve size will cause most, if not all of the fibrous tremolite asbestos to be ground to non-asbestos particulates if tremolite asbestos is present in the sample, causing many false negative results to be reported.

⁷ M.A. Vos, Asbestos in Ontario, Industrial Mineral Report, Ontario Department of Mines and Northern Affairs, Ontario, Canada 1971.

This discussion goes to the whole issue of the general geological definition of “asbestiform” that appears in many of the standard TEM protocols, including the ASTM D5755-09 method I was the primary author.⁸ This general definition is as follows:

“asbestiform-a special type of fibrous habit in which the fibers are separable into thinner fibers and ultimately into fibrils. This habit accounts for greater flexibility and higher tensile strength than other habits of the same mineral.”

This is only a general definition that a geologist might be interested in when evaluating a potential asbestos mine, since the more fibrous the asbestos deposit, the more economic value the mine would have.¹³ The economic value which depends on the grading of the asbestos where the most important factors are fiber or fiber length, tensile strength, flexibility, and spinnability among others, as shown in the Table 8.

Table 8
Physical Properties of Asbestos

M.A. Vos, Asbestos in Ontario

Asbestos Type	Tensile strength (PSI)	Flexibility	Spinnability
Chrysotile	80,000-100,000	High	Very Good
Amosite	16,000 - 90,000	Good	Good
Crocidolite	100,000-300,000	Good	Good
Tremolite solid solution series	<1,000 - 8,000	Poor	Poor
Anthophyllite	4,000 or less	Poor	Poor

As the above table shows, the physical properties of tremolite and anthophyllite asbestos low tensile strength, poor flexibility and spinnability, as compared to the other three asbestos types found in products, and yet are regulated asbestos.

In a recent publication by Germine & Puffer entitled “Anthophyllite Asbestos from Staten Island, New York: Longitudinal Fiber Splitting”, the authors concluded that the low quality characteristics of anthophyllite asbestos from the Staten Island mine are consistent with the anthophyllite asbestos of the Finland mine.⁹ These characteristics include low aspect ratios, longitudinal splitting rather than crystal growth and “rather brittle such that they could not be woven in the manner of high quality chrysotile.” This paper verifies that that anthophyllite

⁸ ASTM D5755-09 Dust Method

⁹ Mark Germine and John H. Puffer, “Anthophyllite asbestos from Staten Island, New York: Longitudinal fiber Splitting”, Archives of Environmental & Occupational Health, (2021)
<https://doi.org/10.1080/19338244.2021.1873095>

asbestos is brittle causing low tensile strength, not flexible or separated into single fibrils, and would not meet the disputed general geological asbestiform definition for commercial asbestos added products they also state in the last sentence of their paper “anthophyllite and amosite fibers are not asbestiform like chrysotile fibers but are never less potentially dangerous.”

If this asbestiform definition was meant to be more than a general geological one, then the various analytical methods, using this definition, would have incorporated how to measure the tensile strength or flexibility of the microscopic asbestos fibers and bundles. Of course, the methods do not provide a means to measure flexibility and tensile strength since that type of measurement is impossible to accomplish by either PLM or TEM. Also, none of these analytical methods define what high tensile strength is, or how many measurements constitute a population.

MAS’s PLM Analysis of Chrysotile in Cosmetic Talc using the CSM Method

The PLM analysis performed by MAS showed that the six containers that were analyzed by the CSM sample preparation method with heavy liquid separation (HLS) was positive for chrysotile asbestos.

MAS’s PLM analysis was able to both detect and determine the amount of chrysotile bundles in the sample with HLS because MAS uses PLM microscopes that has higher resolution and analytical sensitivity capabilities, than your standard PLM microscope which is more suited for analyzing asbestos added products (AAP).

In AAP (chrysotile) samples, as compared to cosmetic talc samples, have a much higher population of very large size chrysotile bundles and orders of magnitude higher concentration levels of chrysotile.

The PLM analysis of AAP samples does not challenge the resolution of the typical PLM microscope optics, or burden the microscopist with very long sample analysis times. For example, in most PLM labs, including MAS’s, the typical time required for an experienced PLM microscopist to analyze AAP, where the majority of the AAP samples contain approximately 10 to 25 % asbestos, will only take about 15 and 20 minutes to complete the analysis.

With a cosmetic talc sample on the other hand, a typical PLM analysis at MAS, for either chrysotile or amphiboles asbestos, would routinely take 2 to 4 hours for a positive sample and a minimum of 20 minutes to one hour for a negative sample, if there are no pigments in the sample. In order to both detect and analyze the small size of the chrysotile bundles (10 to 20 μm in length), that are typically found in cosmetic grade talcum powder, through the use of dispersion staining, the PLM microscope must have “flat” objective lenses, and a HD video camera attached to the PLM microscope that is interfaced to a high definition monitor.

The MAS PLM microscopes are Leica DM2700P PLM microscopes, where all of the objective lens including the 10X central stop dispersion lens are the flat type, also known as infinity lens, LED light source, and are coupled with state-of-the-art HD digital camera and 37" HD monitor. To detect chrysotile bundles, it is highly recommended that this type of PLM microscope setup should be used for the PLM analysis of cosmetic talc samples.

It is also my opinion that the PLM analyst must first analyze prepared talcum powder standards, containing UCC SG-210 or RG-144 chrysotile, to become familiar with both the size of chrysotile structures found in cosmetic talc, as well as the difference in the refractive indices for the chrysotile as compared chrysotile added products.

Both the RG-144 and RG-210 Calidria chrysotile and the chrysotile found in the talcum powder samples typically shows central stop dispersion colors (CSDS) from blues (α) to golden yellows (γ) in 1.550 liquid, and blue to a dark gold in 1.560 liquid. MAS has been reporting this range of CSDS colors for the chrysotile detected in the cosmetic talc samples for almost two years using 1.550 RI liquid. During that time, experts retained by a number of cosmetic talc manufacturers, and have repeatedly testified that MAS's CSDS findings are not appropriate for chrysotile. Therefore, in their opinions, MAS was and has been misidentifying fibrous/platy talc edge or cellulose as chrysotile.

Additionally, Dr. Gunter, while working as a defense expert for Gold Bond defense counsel, analyzed samples of RG-144 and SG-210 Calidria chrysotile, that MAS provided to him, and he confirmed in a recent deposition that "Calidria chrysotile can produce a range of CDSC colors from bluish to golden-yellow in 1.550 liquid."¹⁰ Dr. Gunter's Calidria chrysotile results are consistent with our laboratory's findings, which validates our PLM chrysotile findings in the cosmetic talc samples.¹¹

Dr. Gunter's testimony about his Calidria CSDS results is in direct contradiction to his original criticism of the "yellow-gold" dispersion color, as well as Dr. Matt Sanchez and Mr. Alan Seagrave's past testimony on this issue.

It is my opinion that when these defense experts were testifying that our laboratory was misidentifying fibrous talc or talc plates on edge for chrysotile based on the CSDS "yellow color", as it turns out, the opposite was true they were the ones misidentifying chrysotile as fibrous talc or talc plates on edge.

¹⁰ Deposition of Dr. Mickey Gunter, Woods, Jesse & Sarah vs. Kolmar Laboratories Inc. et al. Supreme Court in the State of New York, County of Monroe, #E202000384

¹¹ Expert Report, October 9, 2023 "Comparison of Ri's and Chrysotile Structure Size Union Carbide's SG-210 Chrysotile product from the Coaling Mine California, Montanan Talc, Fibrous talc and Reduced Size NIST 1866b Chrysotile Standard.

Birefringence Measurements

The key optical property to differentiate fibrous talc from chrysotile asbestos, when using the PLM method, is determining the difference in the birefringence (BIR) value between these two elongated minerals. Most PLM analysts will just use the PLM cross-polar condition to visually estimate the magnitude of the BIR (Low, Moderate or High) by the amount of brightness and change in wavelength colors that are observed.

This visual estimate of the amount of birefringence is typically done under cross-polar conditions and is a subjective interpretation by the PLM analyst, therefore, it lead to errors. A more accurate determination of BIR is to calculate the numerical BIR value by simply subtracting the measured perpendicular RI from the measured parallel RI ($n_{\parallel} - n_{\perp}$).

The subtracted BIR results give the analyst a numerical BIR value that is either classified as **Low (<0.01)**, **Moderate (0.01 to 0.05)** and **High (>0.05)**.

Fibrous talc and/or talc plates on edge will have a calculated BIR value that is typically at the high end of Moderate (0.045) to greater than 0.05 which is in the High BIR range. Chrysotile on the other hand, will have BIR values that range from the middle to the upper end of the Low range to the lower end of the Moderate range. The average calculated range BIR's, for the detected chrysotile bundles from the powder samples for CSM PLM method had a range of **0.005 to 0.017** which falls in the LOW end of BIR to the low end of Moderate classifications when done by calculation.

The BIR difference between fibrous talc and chrysotile, as demonstrated by MAS, is also verified by the EPA in their 600/R-93/116 PLM methodology document as shown in Table 2-2, page 21.¹²

Table 2-2, "Optical Properties of Asbestos Fibers", provides four sets of refractive indexes measured from chrysotile bundles that have an overall average BIR of 0.011. In that same table, EPA published a range chrysotile BIR's of 0.004 to 0.017 (Low to moderate). This BIR range reported by EPA, was from the Maximum and Minimum values obtained from references 2, 11, 12, and 18 located in Section 2.2.

The method that EPA used for the BIR was to subtract the highest alpha from the highest gamma, then subtract the lowest alpha from the lowest gamma. The EPA referenced BIR method is the same way that MAS determined the BIR for the chrysotile bundles found in the J&J talcum powder samples reported here.

The EPA R93 protocol also provides RI and BIR data for both fibrous talc and Flat Cellulose Ribbons that can be found in their Table 2.5. For the RI's of fibrous talc example, EPA reports

¹² EPA/600/R-93/116. Test Method – Method for the Determination of Asbestos in Bulk Building Materials

refractive index 1.600-1.540 with a measured BIR of 0.06, and for cellulose ribbons, the reported EPA RI's are 1.580-1.530 with a measured BIR of 0.05 as shown in Table 9.

Table 9
EPA-R93: Optical Properties of Selected Fibers
Fibrous Talc & Cellulose Ribbons

Fiber Type	RI Parallel/Perpendicular	BIR Calculations
Fibrous Talc	1.600-1.540	0.060 "High"
Cellulose	1.580-1.530	0.050 high end of Moderate

In summary, this data demonstrates that the reported chrysotile bundles in the J&J talcum powder container samples analyzed by MAS have both the appropriate range of refractive indexes and BIR demonstrating that chrysotile asbestos was correctly identified in each container samples and it also demonstrates that fibrous talc particles or talc plates on edge were not misidentified as chrysotile.

CSM PLM Validation Procedure for CSM Sample Preparation Method

J&J MDL Talcum Powder Sample Totals

The February 1, 2019 MDL Supplement Report for the historical J&J talcum powder products (JBP & STS) analysis demonstrated that both the Italian and the Vermont mines that J&J sourced their talcum powder from contained significant amounts of amphibole asbestos (tremolite & anthophyllite/cummingtonite). Additionally, the 15 MDL historical Imerys talc ore samples sourced from their Vermont mine, were found to contain tremolite asbestos. The Imerys historical retains were samples of mostly West Windsor Grade 66 which was the product that J&J used for JBP and STS from the late 1960s to 2003.

Between the MDL historical and non-historical J&J talcum powder products, along with the retain samples, MAS has analyzed a total of 118 J&J talcum powder samples from the Italian, Vermont and Chinese talc mine sources. The following is a breakdown between the three talc mines for the number of talc samples from each mine that MAS has analyzed along with the number of positive samples for each group.

1960 to 1968: Italian Historical J&J Containers: of the **14 analyzed, 7 were positive (50%)** asbestos

1968 to 2003: Vermont Historical J&J Containers: of the **36 samples analyzed, 29 were positive (81%)** for asbestos

1968 to 2003: Vermont Historical Imerys Retains: of the **15 samples analyzed, 8 were positive (53%)** for asbestos

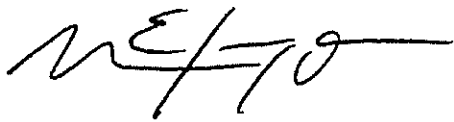
1968 to 2003: Vermont Non-historical J&J Containers: of the **3 samples analyzed, 3 were positive** (100%) for asbestos

2003 to 2021: Chinese Non-historical J&J Containers: of the **43 samples analyzed, 40 were positive** (93%) for asbestos

2003 to 2021: Chinese Historical J&J/Imerys Retains: of the **11 samples analyzed, 11 were positive** (100%) for asbestos

All total, for the three talc mine sources that supplied J&J talcum powder for their two body powder products sold in the United States, MAS has analyzed **96 containers of J&J talcum powder products** that had detectable concentrations of asbestos in **82%** of the containers. Additionally, the **26 historical talc ore samples that MAS has analyzed**, sourced from the Vermont and Chinese talc mines, found **73% positive for asbestos**.¹³

Sincerely,



William E. Longo, Ph.D., CEO

¹³ MAS Chart of J&J Testing (Current as of September 16, 2021)

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Table 1

JBP Talcum Powder Sample Container Descriptions

	MAS Sample No.	Sender	Date of Manufacture	Sample size (oz)	Source of Sample	ATEM Amphibole Asbestos	PLM Amphibole Asbestos %	CSM Chrys %
1	M66514-001	SGPB	Circa 1980	9 oz.	Carolyn Weirick	247,000 s/g anthophyllite	N/A	N/A
2	M70484-001	SGP	1994	15 oz.	Linda Zimmerman	NAD	NAD	0.01-0.10%
3	M71046-001	SGPB	1996	9 oz.	Marie Colley	NAD	NAD	0.002-0.01%

These three additional Vermont sourced JBP samples were all found to be positive for either amphibole asbestos or chrysotile.

J&J Chinese Talc Source Container Analysis

Tables 2 thru 6 provides the J&J sample information and analytical results for the 40 JBP containers where talcum powder was sourced from China.

Table 2
JBP Talcum Powder Sample Container Descriptions and Analysis Results
Samples 1 thru 8

	MAS Sample No.	Sender	Date of Manufacture	Source of Sample	ATEM Amphibole Asbestos	PLM Amphibole Asbestos %	CSM Chrys %
1	M66507-001	SGPB JBP	2004	Gail Koretoff	NAD	N/A	0.0003-0.001% 779,600 bundles/g
2	M66508-001	SGPB JBP	2017	Off the Shelf-CVS	NAD	N/A	0.001-0.002% 412,700 bundles/g
3	M66509-001	SGPB JBP	2017	Off the Shelf-CVS	NAD	N/A	0.0002-0.001% 463,000 bundles/g
4	M66513-001	SGPB JBP	2010	Earl Wheeler	NAD	N/A	0.0002-0.001% 181,900 bundles/g
5	M66515-001	SGPB JBP	2012	Pauline Citizen	8,740 s/g Tremolite	N/A	0.01-0.10%
6	M66516-001	SGPB	2012	Pauline Citizen	8,694 s/g Tremolite	N/A	N/A
7	M68379-001	SGPB	2004	JoAnne Anderson	NAD	N/A	N/A

8	M68379-002	SGPB	2004	JoAnne Anderson	7,160 s/g Tremolite	N/A	N/A

Table 3

J&J Talcum Powder Sample Container Descriptions and Analysis Results

Samples 9 thru 16

	MAS Sample No.	Sender	Date of Manufacture	Source of Sample	ATEM Amphibole Asbestos	PLM Amphibole Asbestos %	CSM Chrys %
9	M66352-001	Lanier JBP	2012	Krystal Kim	NAD	N/A	N/A
10	M66352-002	Lanier JBP	2014	Krystal Kim	17,200 s/g	N/A	N/A
11	M68483-001	SGPB JBP	2012	Nancy Cabibi	NAD	N/A	N/A
12	M67420-001	#1 Lanier JBP	2017	off the shelf Imperial Westwood	NAD	N/A	0.0002-0.0008% 428,000 bundles/g
13	M67420-002	#2 Lanier JBP	2017	off the shelf Imperial Westwood	NAD	N/A	0.0002-0.0006% 489,000 bundles/g

14	M67420-003	#3 Lanier JBP	2012	off the shelf Imperial Westwood	18,800 s/g anthophyllite	N/A	N/A
15	M67420-004	#4 Lanier JBP	2017	off the shelf Imperial Westwood	NAD	N/A	0.0002-0.0005% 332,000 bundles/g
16	M67420-005	#5 Lanier JBP	2017	off the shelf Imperial Westwood	NAD	N/A	0.0002-0.001% 460,100 bundles/g

Table 4

J&J Talcum Powder Sample Container Description & Analysis

Samples 17 thru 24

	MAS Sample No.	Sender	Date of Manufacture	Source of Sample	ATEM Amphibole Asbestos	PLM Amphibole Asbestos %	CSM Chrys %
17	M65329-013	MAS	2016	Off the shelf Publix Control Sample	NAD	N/A	0.0005-0.0008% 288,900 b/g
18	M70484-001	SGP JBP	2016	Linda Zimmerman	NAD	N/A	0.001-0.01%
19	M70877-001	Kazan JBP	2012	Dan Doyle	NAD	NAD	0.01-0.02%
20	M70877-002	Kazan JBP	2017	Dan Doyle	NAD	NAD	0.001-0.002%
21	M71095-001	Simmons JBP	2014	Janet Titley	NAD	NAD	0.001-0.002%

22	M71166-001	MAS JBP	2018	off the shelf CVS	N/A	NAD	0.0015-0.0017
23	M71166-001	MAS JBP	2019	off the shelf CVS	N/A	NAD	0.001-0.003%
24	M71166-001	MAS JBP	2019	off the shelf Walgreens	N/A	NAD	0.001-0.003%

Table 5

J&J Talcum Powder Sample Container Description & Analysis

Samples 25 thru 32

	MAS Sample No.	Sender	Date of Manufacture	Source of Sample	ATEM Amphibole Asbestos	PLM Amphibole Asbestos %	CSM Chrys %
25	M71180-001	HFM JBP	2020	off the shelf Target	N/A	NAD	0.002-0.003%
26	M71211-001	Weitz JBP	2019	off the shelf Holly Johnson-Walmart	N/A	N/A	0.001-0.002%
27	M71211-002	Weitz JBP	2019	off the shelf	N/A	N/A	0.001-0.002

				Holly Johnson-Walmart			
28	M71211-003	Weitz JBP	2019	off the shelf Holly Johnson Walmart	N/A	N/A	0.001%
29	M71211-004	Weitz JBP	2019	off the shelf Holly Johnson Walmart	N/A	N/A	0.001-0.002%
30	M71211-005	Weitz JBP	2019	off the shelf Holly Johnson-Walmart	N/A	N/A	0.001-0.002
31	M71211-006	Weitz JBP	2019 JBP	off the shelf Holly Johnson-Walmart	N/A	N/A	0.001-0.002%
32	M71211-007	Weitz JBP	2019 JBP	off the shelf Holly Johnson-Walmart	N/A	N/A	0.001-0.002%

Table 6

J&J Talcum Powder Sample Container Description & Analysis

Samples 33 thru 42

	MAS Sample No.	Sender	Date of Manufacture	Source of Sample	ATEM Amphibole Asbestos	PLM Amphibole Asbestos %	CSM Chrys %
33	M71180-008	Weitz JBP	2019	off the shelf Holly Johnson Walmart	N/A	N/A	0.001-0.002%
34	M71211-009	Weitz JBP	2019	off the shelf Holly Johnson-Walmart	N/A	N/A	0.001-0.002%
35	M71211-10	Weitz JBP	2019	off the shelf Holly Johnson-Walmart	N/A	N/A	0.001-0.002
36	M71216-001	Kazan JBP	2019	off the shelf Lucky	N/A	N/A	0.001-0.002% 273,000 bundles/g
37	M71216-002	Kazan JBP	2019	off the shelf Lucky	N/A	N/A	0.0009-0.001% 254,000 bundles/g
38	M71241-001	MAS JBP	2018	off the shelf Ralphs	N/A	N/A	0.0007-0.001% 168,142 bundles/g

39	M71241-002	MAS JBP	2018	off the shelf Ralphs	N/A	N/A	0.001-0.002% 273,000 bundles/g
40	M71241-003	MAS JBP	2018	off the Shelf Ralphs	N/A	N/A	0.001% 307,600 bundles/g
41	M71614-001	Kazan JBP	2018	off the Shelf	N/A	N/A	0.0003-0.0006% 56,000 bundles/g
42	M71722-001	BBG&A JBP	2004	Tamara Newsome	NSD	NSD	0.001-0.002% 90,000 bundles/g
43	M71722-002	BBG&A JBP	2014	Tamara Newsome	NSD	NSD	0.001-0.002% 149,000 bundles/g

Table 7
J&J and Imerys Guangxi Chinese Retains
Analysis for Asbestos
Samples 1 thru 11

	MAS Sample No.	Sender SGP	Imerys Ore Lot	BV/RJL Sample ID	ATEM Amphibole Asbestos	PLM Amphibole Asbestos %	CSM Chrys %
1	M71109-001	Imerys Mine Seagrave	N/A	BV #A5152004-006A	NAD	NAD	0.001-0.002%
2	M71110-001	Imerys Mine Sanchez	N/A	RJLG No. 3136120	NAD	NAD	0.001-0.002%
3	M71111-001	J&J Retain	MVN C01315C2	RJLG No. 3138491	NAD	NAD	0.001%
4	M71111-002	J&J Retain	MVN S0246C2	RJLG No. 313455	NAD	NAD	0.001%
5	M71111-003	J&J Retain	MVN S0246C2	RJLG No. 3140762	NAD	NAD	0.001%
6	M71111-004	J&J Retain	MVN S0246C2	RJLG No. 3141790	NAD	NAD	0.0008-0.001%

7	M71111-005	J&J Retain	MVN S0246C2	RJLG No. 3143083	NAD	NAD	0.001%
8	M71111-006	J&J Retain	MVN S0246C2	RJLG No. 3143083	NAD	NAD	0.001%
9	M71111-007	J&J Retain	MVN S0246C2	RJLG No. 3145361	NAD	NAD	0.001-0.002%
10	M71111-008	J&J Retain	MVN S0246C2	RJLG No. 3147067	NAD	NAD	0.001%
11	M71111-009	J&J Retain	MVN S0246C2	RJLG No. 3149010	NAD	NAD	0.001-0.002%

Sincerely,



William E. Longo, Ph.D., CEO

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Exhibit 28

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**3rd Supplemental MDL Report****Analysis of Non-Historical J&J's Talcum Powder Consumer Product Containers and J&J Chinese Historical Talc Retain Samples**

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**Materials Analytical Services, LLC
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November 17, 2023

3rd MDL Supplemental Report

This supplemental report contains the following new information obtained by MAS since the 2nd Supplement MDL Report was issued on February 1, 2018. MAS has analyzed 44 J&J talcum powder products for both chrysotile and amphibole asbestos. These additional samples focus primarily on Chinese sourced talcum powder that J&J used from 2004 to 2022 in North America, and three additional Vermont sourced JBP samples.

Also, when the last MDL report was issued, MAS was not analyzing cosmetic talc samples for chrysotile using the heavy liquid separation (HLS) sample preparation method. After reviewing the Colorado School of Mines (CSM) protocol for the analysis of chrysotile using a HLS sample preparation method with PLM analysis, MAS worked on developing a more efficient protocol for the detection of chrysotile in cosmetic talc samples. The Colorado School of Mines developed this method.

MAS has analyzed 40 JBP containers that were all manufactured with J&J's Chinese talc source. MAS has also analyzed 11 J&J Chinese talc retains along with two additional JBP Vermont sourced talc containers.

All additional J&J talcum powder product analysis Reports have been previously provided to defense counsel on behalf of J&J, and I have been questioned by J&J defense counsel on all of these sample analysis reports during numerous depositions. These reports provide all of the sample chain-of-custodies, the analytical protocols used for that particular set of samples and results.

Therefore, this Supplemental report will only contain the results for the 43 additional analysis that was performed after our last MDL Supplement Report was issued on February 1, 2019.

J&J Vermont Talc Source

Table 1 provides the J&J sample information and analytical results for the three JBP containers where talcum powder was sourced from Vermont.

J&J Chinese Talc Source

The overall results show that out of the 43 J&J talcum powder samples analyzed, that contained Chinese sourced talc, 40 or 93% were positive for either amphibole asbestos and or chrysotile. As discussed above, the Reports for 41 of the 43 JBP and STS sample sets have been provided to J&J, and in those reports will contained the full methodology used for each set of sample analysis. Therefore, there was not any reason to duplicate the methodology here in this report.

Besides J&J talcum powder container samples, MAS also received 11 Chinese retained talc samples that consisted of two Imerys retains and nine J&J retains. The results of these 11 samples are shown in Table 7. Tables 1 thru 7 can be found at the end of this report.

All 11 of the Guangxi providence talc sourced sample retains were found to be positive for chrysotile asbestos at a concentration that ranged from 0.0008% to 0.002%. For the 42 Chinese sourced J&J talcum powder products and 11 retain samples, gave a total of 50 samples were positive for asbestos out of the 53 samples (94%).

DISCUSSION/CONCLUSION

Colorado School of Mines (w HLS) Sample Preparation of Cosmetic Talc

This section reviews the development of the double density cosmetic talc sample preparation method, by the Colorado School of Mines Institute, on behalf of J&J, for the concentration of chrysotile and amphibole asbestos in talc samples.

The sample preparation part of the MAS chrysotile analysis is based on the work done by the CSMP in the early 1970's for the detection specifically for possible chrysotile and amphibole asbestos in J&J sourced Vermont talcum powder, from the Frostbite mine using, double heavy liquid separation (<2.9 g/cc & >2.9 g/cc).

An overview of this method development by CSM is as follows:

In a January 17, 1973 Windsor Minerals document sent by R.N. Miller to Mr. Bill Ashton of J&J, subject: "Core samples, diamond drill holes, **Frostbite mine**" informing Bill Ashton that Windsor Minerals was sending 1/8 split of our retain samples from the cosmetic ore sampling done in these holes. The memo goes on to say, "This is the material which was sent to Colorado identified as CN core which we conducted our pilot production runs which yielded Grade 66 material. (JNJ000682638)¹

Cosmetic Talc Core Samples mailed to Colorado School of Mines:

Hole Numbers

1. 30-71-S 4. 32-71-S
2. 30-B-71-S 5. 34-71-S
3. 30-C-71-S

¹ January 17, 1973 Windsor Minerals document sent by R.N. Miller to Mr. Bill Ashton of J&J, subject: "Core samples, diamond drill holes, Frostbite mine".

February 26, 1973 Colorado School of Mines (CSM) document for, Project no. C10704, reported their analysis to W.H. Ashton, where these same five Frostbite core samples were prepared with heavy liquid separation (HLS) with two different densities (<2.9 & >2.9) and with acid leaching. (JNJNL61_000008084 thru JNJNL61_000008089). The “as received samples” and were first analyzed using x-ray diffraction and microscopic studies without HLS.

The results stated that “Relative to possible asbestos type minerals, samples 30-71-S and 30-B-71-S contained slight traces of tremolite-actinolite minerals. Sample 32-71-S is suspected to contain a very minor amount of serpentine which maybe chrysotile”.

As further outlined in the 2/26/1973 Report, the next phase of study was that the 5 Frostbite talc ore samples were first fractionated using heavy liquid separation (HLS) and then with acid dissolution, then analyzed by XRD. The report describes the HLS method as follows: Each of the ground talc ore was separated into fractions by centrifugation in heavy liquids: specific gravity <2.90 and specific gravity >2.90. After the x-ray diffraction of the >2.90 specific gravity fractions, the sample was leached with 1:1 HCL to remove magnesite. The insoluble residue was then examined for amphiboles with a petrographic microscope. In both Phase 1 and Phase 2, possible serpentine was detected in Frostbite ground talc ore sample 32-71-S.

The last phase of this analysis, CSM attempted to verify the presence of serpentine in sample 32-71-S <2.65 fraction by step scan x-ray diffraction over the critical diffraction peaks of serpentine which is in the 7Å and 14Å region, “the initial result suggested that serpentine, not chlorite, was present.”

Microscopic examination of the <2.65 fraction identified a “very minor (1%) amounts of possible serpentine fibers” that was facilitated by staining with 1% iodine in glycerin.

The report recommended that further work be done on this sample (32-71-S). It has been suggested in the past by some that this statement meant that more work was needed on the heavy liquid separation sample preparation method. That suggestion is not true.

April 2, 1973 Colorado School of Mines (CSM) document for Project no. C10704, reported their analysis to W.H. Ashton, where the primary objective of the studies was to determine the presence or absence of tremolite and chrysotile in talc bearing head samples labeled 1 through 4.

For the HLS sample preparation and analysis, by CSM, the four head talc ore samples were first ground into two size ranges of minus 200 plus 325 and minus 325. The samples were then prepared with CSM’s double heavy liquid separation method and acid dissolution, analyzed by XRD and or optical microscopy. For optical microscopy of tremolite analysis, RI fluid 1.600 was used for their PLM analysis of the tremolite asbestos. MAS has been criticized in the past for

using 1.605 RI fluid because it was not high enough as suggested by J&J's experts, even though the CSM used 1.600 RI fluid which is a lower RI fluid.

Colorado School of Mines Results:

Chrysotile (HLS <2.65 g/cc)

- 1) **Minus 200 plus 325 mesh:** Chrysotile abundance was estimated as <0.0001% in sample 3 and <0.0006% for sample 4.
- 2) **Plus 325 mesh:** Chrysotile abundance was estimated as <0.0007% in samples 2, 3 and <0.0006% for sample 4.

Tremolite (HLS >2.90 g/cc)

- 1) **Minus 200 plus 325 mesh:** possible tremolite was found in sample 2 is estimated at <0.002%
- 2) **Minus 325 mesh:** No tremolite was detected in any of the four samples.

These four samples were labeled "head" samples which defined as average grade feed that goes into the mill before the flotation process. There was no identification of the source of the talc samples in the April 2, 1973 Colorado School of Mines Report. However, it is most likely these head samples were collected in the same area that sample 32-71-S was collected from the Frostbite mine in which the very last sentence states. The reason for this is that in the Colorado School of Mines 2/26/1973 report to Dr. Ashton, "that further work be done on this sample 32-71-S".

It would seem reasonable to conclude that the next set of talc samples analyzed was fulfilling that further work statement about Frostbit sample 32-71-S. Also, there were only 36 days between the CSM February and April reports, and all three of these reports have the same CSM Project no. C10704.

December 27, 1973: Colorado School of Mines Research Institute prepared the following report for Johnson & Johnson, "A Procedure to Examine Talc for the Presence of Chrysotile and Tremolite-Actinolite Fibers for Project C10704". (JNJ 000268037 to 045).²

This CSM report provides the methodology using double density heavy liquid separation for chrysotile and amphibole asbestos. It reports a detection limit of 10 ppm (0.00001%) and verification of asbestos types, after separation, was done by optical microscopy.

This method also stated the following: "Electron Microscopy examination employing selected area electron diffraction and/or x-ray emission spectrography may be required in order to

² December 27, 1973, Colorado School of Mines protocol entitled "A procedure to Examine Talc for the Presence of Chrysotile and Tremolite-Actinolite Fibers" Herman Ponder Director, Jerry Krause Senior Scientist and James Link Director Mining Division.

specifically identify small fibrous particulates". The Colorado School of Mines recognized that TEM would be needed to identify for small particles.

Nowhere in this report was there even a suggestion by the Colorado School of Mines that their double density heavy liquid method, for sample preparation, for both chrysotile and amphibole asbestos, was anything but a sound scientific method.

In fact, this sample preparation was approved and signed off by the following individuals from the Colorado School of Mines Research Institute: Herman Ponder, Director, James M. Link, Director Mining Division, and Jerry Krause, Senior Scientist Mining Division.

In the Introduction Section, the second paragraph states the following:

"the impurity level becomes very low (<<1%), it is necessary to examine increasing amounts of sample in order to detect the impurity. As a result of the requirement to detect the proverbial "needle in a haystack," we have evolved a procedure which preconcentrates the impurities prior to examination. The net effect is that a large initial sample is fractioned in order to reject the majority from further examination."

This was one of the reasons that MAS decided to use heavy liquid separation in late 2016 for cosmetic talc analysis as described above by the Colorado School of Mines.

Johns-Manville

Another indication of how confident the Colorado School of Mines was in their double density separation method is that they informed Johns-Manville that they thought this heavy liquid separation method they developed, was good enough to be considered for a patent (JNJMX68_000007044 to 000007046).

In an October 29, 1973 letter from V.E Wolkodoff of Johns-Manville to Mr. Caneer, Colorado School of Mines, in response to a phone call from Mr. Caneer, Mr. Wolkodoff writes the following:

"Specifically, we were interested in your advanced technology used to separate felted masses of asbestos by heavy liquid separation preparatory to staining of chrysotile by iodine as worked out by Morton and Baker of Johns-Manville".

Mr. Wolkodoff further writes, *"I understand your position completely on specific techniques being worked for other companies which are proprietary and, as you had indicated, will probably be patented."*

This letter confirms CSM was both developing this sample preparation method for J&J, and thought it was such an advancement in talc sample preparation technology for PLM analysis, they were considering to protect it with a patent.³

With that said, I have seen no indication or documents that J&J's CSM double density talcum powder sample preparation method was ever patented, or shared with the FDA when they struggled with their own development of a concentration method, or over a period of 50 to 60 years, there is no evidence that J&J ever had their main outside QA labs (McCrone or the R.J. Lee Group) use the much superior CSM sample preparation method, when they were analyzing J&J's talcum powder by XRD, PLM and or TEM for asbestos. The lack of use of the CSM sample preparation method by these two outside labs, explains why hundreds, if not thousands of J&J's talc sample analysis for asbestos analysis were found to be non-detects by the McCrone and RJ Lee labs.

I believe the reason that the CSM talc sample concentration preparation method for chrysotile and amphibole asbestos, was never adopted by the talc and cosmetic industries, can be summed up by the following statements by Dr. Robert Rolle of J&J in two documents. The first document is a May 22, 1973 Report entitled "Proposed Specs for Analyzing Talc for Asbestos". On the third page concerning Dr. Pooley's preconcentration method for tremolite, Dr. Rolle states, "This technique has not been written up yet, but evidently when applied to Vermont talc, 0.5% of the tremolite-type is found." Dr. Nashed of J&J received this report on May 23, 1973 (JNJAZ56_000001892 to 1989)⁴

"The limitation of this method is that it may be too sensitive."

The second document is a February 18th, 1975 memo to Dr. Rolle where he states, "I have also enclosed our test method for the proposed Xray technique which was drawn up by Boots Ltd in conjunction with Dr. Pooley" (JNJNL61_0000062953)⁵

"We deliberately have not included a concentration technique as we felt it would not be in worldwide company interest to do this."

Other Asbestos Concentration Methods for Cosmetic Talc Yardley LTD. Method

A J&J produced document (JNJ00026450 to 4509 redacted) that also has a Bate stamp number DX8011.0010 to .0010 un-redacted) entitled "A Method for the Separation of Impurities from Talc", is a double density separation sample preparation method that is very similar to the CSM

³ October 29, 1973 letter from V.E Wolkodoff of Johns-Manville to Mr. Caneer, Colorado School of Mines.

⁴ May 22, 1973 Report where the Subject, entitled "Proposed Specs for Analyzing Talc For Asbestos".

⁵ February 18th, 1975 memo to Dr. Rolle.

double density sample preparation method.⁶ The primary differences involves the density for the heavy liquid that was used. Where the CSM method uses 2.65 g/cc for the chrysotile and >2.90 g/cc for the amphibole asbestos, the Yardley method uses 2.69 g/cc for chrysotile and 2.83 g/cc for amphibole asbestos. Also, the Yardley method uses a centrifuge speed of 3,000 rpm for 5 minutes, the CSM method uses a centrifuge speed of 800 rpm for two intervals of 30 minutes. The 1991 published Blount HLS sample preparation method for amphibole asbestos, uses 2.81 g/cc and a centrifuge speed of 7,000 rpm for 10 minutes.

Each of these heavy liquid separation methods are using slightly different HL density liquids and different centrifuge speeds and times. The main point of this is that scientists are apparently using different HL densities and centrifugation times in an effort to increase analytical sensitivity. There is no right or wrong, the only thing important is that heavy liquid separation of asbestos from talcum powder is a well-researched method developed by J&J almost 50 years ago, published by Dr. Blount in 1990/91, and is also an International Standards Organization protocol (ISO 22262-1 &2) method, as well as used by the New York Environmental Laboratory Accreditation Program.

Physical Prosperities of Tremolite & Anthophyllite

In the December 27, 1973 Colorado School of Mines Research report, it is noteworthy that tremolite was detected in the minus 200 plus 325 samples, but not in the minus 325. These findings are consistent with the Pang et al. publication in 1987.⁷ For this study, they spiked talc with tremolite (1.0% and 0.1%) and ground these samples for two size ranges: 1) 50% was minus 325 and 2) 100% minus 325.

The results showed that for the TEM analysis (100 grid openings) the 1% spiked tremolite sample, at 50% minus 325, the number of tremolite fibers detected was 1,592, and for the 100% minus 325, the number of tremolite fibers was reduced to 91 structures or 5% detected.

For the 0.1 wt. percent, for the TEM analysis (100 grid openings) the 0.1 % tremolite spiked sample at 50% minus 325, the number of tremolite fibers detected was 88 and for the 100% minus 325, the number of tremolite fibers was reduced to 0 structures detected.

What is important about this study, is first that the tremolite used was characterized by the authors as tremolite asbestos/asbestiform due to the aspect ratio. Second, the asbestos fibers/talc spiked samples were ground so that there were two different particle size populations for two sample sets, 1st set, 50% of the sample would pass through a 325 mesh per inch sieve (45 µm opening), 2nd set, 100% of the sample would pass through the 325 mesh.

⁶ A Method for the Separation of Impurities from Talc

⁷ Thomas W.S. Pang, et al., "Determination of tremolite Asbestos in Talc Powder Samples" Ann. Occup. Hyg., Vol. 31, No. 2, pp 219-225, 1987.

The Pang publication showed that when the talc was ground to the point that the size of the talc particles was small enough that 100% of the powder went through a 325 mesh, it either greatly reduced (1.0% spiked sample) or eliminated (0.1%), which is consistent with what Colorado School of Mines reported to J&J in their April 2, 1973 Protocol.

The reason for the tremolite asbestos being ground up is due the physical properties of tremolite asbestos, as well as anthophyllite asbestos, where both tremolite and anthophyllite have both low tensile strengths causing (brittle), and not flexible like chrysotile, and to a lesser degree, amosite and crocidolite.⁸ Since tremolite asbestos is brittle, the grinding to a minus 325 mesh size, by both the CSM and the Pang research, simply broke the tremolite fibers/bundles into particles.

The CSM results also showed that chrysotile was not affected when ground to a minus 325 mesh size because chrysotile has high tensile strength, good flexibility and is the reason that most all asbestos-containing cloth is woven out of chrysotile and not ever from tremolite or anthophyllite asbestos. However, the size and width of the chrysotile bundles may be affected in the milling operation and that would account for the 5 to 20 μm in length to 2 to 4 μm in width range that we see in the cosmetic talcs, as well as the UCC SG-210 chrysotile.

Additionally, this data suggests that that cosmetic talc being milled to either a minus 200, and in some cases, a minus 325, is lowering the tremolite and or anthophyllite concentrations in the talcum powder, unless the concentration is so high in the talc ore, that a significant amount of the amphibole asbestos survives the milling process as demonstrated with the MDL samples in our 2-1-2019 report as well as for the samples reported here that were positive for either tremolite or anthophyllite.

The Pang study clearly shows that milling talc to either minus 200 or minus 325 sieve size greatly reduces the amount fibrous tremolite asbestos detected by TEM, which would also have an effect on the amount detected by PLM.

For many years the Cosmetic, Toiletry Fragrance Association (CTFA) J4-1 method for the detection of asbestiform amphibole minerals (tremolite or anthophyllite) in cosmetic talc first analyzed by XRD and if the talcum powder sample is negative for either tremolite and or anthophyllite, the analysis is stopped and the sample declared as not to not contain asbestos. On the other hand, if the sample is positive by XRD then the sample is analyzed by PLM to determine if the tremolite or anthophyllite is positive.

The J4-1 sample preparation method for PLM is located on page 10 at Note 1, and states the following: Talcs to be analyzed and the tremolite used to prepare standard samples must be

⁸ M.A. Vos, Asbestos in Ontario, Industrial Mineral Report, Ontario Department of Mines and Northern Affairs, Ontario, Canada 1971.

finer than 325 mesh (maximum particle size of 44 microns). The Tekmar Analytical Mill (Model A-10) is recommended.

Since the J4-1 PLM method requires that 100% talc sample be milled to a minus 325 sieve size, will cause most, if not all of the fibrous tremolite asbestos to be ground to non-asbestos particulates if tremolite asbestos is present in the sample, causing many false negative results to be reported.

This discussion goes to the whole issue of the general geological definition of “asbestiform” that appears in many of the standard TEM protocols, including the ASTM D5755-09 dust method that I was the primary author.⁹ This general definition is as follows:

“asbestiform-a special type of fibrous habit in which the fibers are separable into thinner fibers and ultimately into fibrils. This habit accounts for greater flexibility and higher tensile strength than other habits of the same mineral.”

This is only a general definition that a geologist might be interested in when evaluating a potential asbestos mine, since the more fibrous the asbestos deposit, the more economical value the mine would have.¹³ The economic value which depends on the grading of the asbestos where the most important factors are fiber or fiber length, tensile strength, flexibility, and spinnability among others, as shown in the Table 8.

Table 8
Physical Properties of Asbestos

M.A. Vos, Asbestos in Ontario

Asbestos Type	Tensile strength (PSI)	Flexibility	Spinnability
Chrysotile	80,000-100,000	High	Very Good
Amosite	16,000 - 90,000	Good	Good
Crocidolite	100,000-300,000	Good	Good
Tremolite solid solution series	<1,000 - 8,000	Poor	Poor
Anthophyllite	4,000 or less	Poor	Poor

As the above table shows, the physical properties of tremolite, and anthophyllite asbestos have low tensile strength, both poor flexibility and spinnability, as compared to the other three asbestos types found in asbestos added products, and yet are regulated asbestos.

In a recent publication by Germine & Puffer entitled “Anthophyllite Asbestos from Staten Island, New York: Longitudinal Fiber Splitting”, the authors concluded that the low quality

⁹ ASTM D5755-09 Dust Method

characteristics of anthophyllite asbestos from the Staten Island mine, are consistent with the anthophyllite asbestos of the Finland mine.¹⁰ These characteristics include low aspect ratios, longitudinal splitting rather than crystal growth and “rather brittle such that they could not be woven in the manner of high quality chrysotile.” This paper verifies that that anthophyllite asbestos is brittle causing low tensile strength, not flexible or separated into single fibrils, and would not meet the disputed general geological asbestiform definition for commercial asbestos added products, but they also state in the last sentence of their paper “anthophyllite and amosite fibers are not asbestiform like chrysotile fibers but are never less potentially dangerous.”

If this asbestiform definition was meant to be more than a general geological one, then the various analytical methods, using this definition, would have incorporated into the analytical methods, how to measure the tensile strength or flexibility of the microscopic asbestos fibers and bundles. Of course, the methods do not provide a means to measure flexibility and tensile strength since that type of measurement is impossible to accomplish by either PLM or TEM. Also, none of these analytical methods define what high tensile strength is, or how many measurements constitute a population.

MAS’s PLM Analysis of Chrysotile in Cosmetic Talc using the CSM Method

The PLM analysis performed by MAS showed that the six containers that were analyzed by the CSMP sample preparation method with HLS was positive for chrysotile asbestos.

MAS’s PLM analysis was able to both detect and determine the amount of chrysotile bundles in the sample with HLS because MAS uses PLM microscopes that has higher resolution and analytical sensitivity capabilities, than your standard PLM microscope which is more suited for analyzing asbestos added products (AAP).

In AAP (chrysotile) samples as compared to cosmetic talc samples, has a much higher population of very large size chrysotile bundles and orders of magnitude higher concentration levels of chrysotile in these types of products.

The PLM analysis of AAP samples does not challenge the resolution of the typical PLM microscope optics, or burden the microscopist with very long sample analysis times. For example, in most PLM labs, including MAS’s, the typical time required for an experienced PLM microscopist to analyze asbestos added products (AAP), where the majority of the AAP samples

¹⁰ Mark Germine and John H. Puffer, “Anthophyllite asbestos from Staten Island, New York: Longitudinal fiber Splitting”, Archives of Environmental & Occupational Health, (2021)
<https://doi.org/10.1080/19338244.2021.1873095>

contain approximately 10 to 25 % asbestos, will only take about 15 and 20 minutes to complete the analysis.

With a cosmetic talc sample on the other hand, a typical PLM analysis at MAS, for either chrysotile or amphiboles asbestos, would routinely take 2 to 4 hours for a positive sample and a minimum of 20 minutes to hour for a negative sample, if there are no pigments in the sample. In order to both detect and analyze the small size of the chrysotile bundles (10 to 20 μm in length), that are typically found in cosmetic grade talcum powder, through the use of dispersion staining, the PLM microscope must have “flat” objective lenses, and a HD video camera attached to the PLM microscope that is interfaced to a high definition monitor.

The MAS PLM microscopes are Leica DM2700P PLM microscopes, where all of the objective lens, including the 10X central stop dispersion lens are the flat type, also known as infinity lens, LED light source, and are coupled with state-of-the-art HD digital camera and 37” HD monitor. To detect these size chrysotile bundles, it is highly recommended that this type of PLM microscope setup should be used for the PLM analysis of cosmetic talc samples.

It is also my opinion that the PLM analyst must first analyze prepared talcum powder standards, containing UCC SG-210 or RG-144 chrysotile, to become familiar with both the size of chrysotile structures found in cosmetic talc, as well as the difference in the refractive indices for the chrysotile as compared chrysotile added products.

Both the RG-144 and RG-210 Calidria chrysotile and the chrysotile found in the talcum powder samples typically shows central stop dispersion colors (CSDS) from blues (α) to golden yellows (γ) in 1.550 liquid, and blue to a dark gold in 1.560 liquid. MAS has been reporting this range of CSDS colors for the chrysotile detected in the cosmetic talc samples for almost two years using 1.550 RI liquid. During that time, defendant experts, retained by a number of cosmetic talc manufacturers, and have repeatedly testified that MAS’s CSDS findings are not appropriate for chrysotile. Therefore, in their opinions, MAS was and has been misidentifying fibrous/platy talc edge or cellulose as chrysotile.

Additionally, Dr. Gunter, while working as a defense expert for Gold Bond defense counsel, analyzed samples of RG-144 and SG-210 Calidria chrysotile, that MAS provided to him, and he confirmed in a recent deposition that “Calidria chrysotile can produce a range of CDSC colors from bluish to golden-yellow in 1.550 liquid.”¹¹ Dr. Gunter’s Calidria chrysotile results are consistent with our laboratory’s findings, which validates our PLM chrysotile findings in the cosmetic talc samples.¹²

¹¹ Deposition of Dr. Mickey Gunter, Woods, Jesse & Sarah vs. Kolmar Laboratories Inc. et al. Supreme Court in the State of New York, County of Monroe, #E202000384

¹² Expert Report, October 9, 2023 “Comparison of RI’s and Chrysotile Structure Size Union Carbide’s SG-210 Chrysotile product from the Coaling Mine California, Montanan Talc, Fibrous talc and Reduced Size NIST 1866b Chrysotile Standard.

Dr. Gunter's testimony about his Calidria CSDS results is in direct contradiction to his original criticism of the "yellow-gold" dispersion color, as well as Dr. Sanchez and Mr. Seagrave's past testimony on this issue.

It is my opinion, that when these defense experts were testifying that our laboratory was misidentifying fibrous talc or talc plates on edge for chrysotile based on the CSDS "yellow color", as it turns out, the opposite was true, they were the ones misidentifying chrysotile as fibrous talc or talc plates on edge.

Birefringence Measurements

The key optical property to differentiate fibrous talc from chrysotile asbestos, when using the PLM method, is determining the difference in the birefringence (BIR) value between these two elongated minerals. Most PLM analysts will just use the PLM cross-polar condition to visually estimate the magnitude of the BIR (Low, Moderate or High) by the amount of brightness and change in wavelength colors that are observed.

This visual estimate of the amount of birefringence is typically done under cross-polar conditions and is a subjective interpretation by the PLM analyst, therefore, can lead to errors. A more accurate determination of BIR is to calculate the numerical BIR value by simply subtracting the measured perpendicular RI from the measured parallel RI ($n_{\parallel} - n_{\perp}$).

The subtracted BIR results give the analyst a numerical birefringence (BIR) value that is either classified as **Low (<0.01)**, **Moderate (0.01 to 0.05)** and **High (>0.05)**.

Fibrous talc and/or talc plates on edge will have a calculated BIR value that is typically at the high end of Moderate (0.045) to greater than 0.05 which is in the High BIR range. Chrysotile on the other hand, will have BIR values that range from the middle to the upper end of the Low range to the lower end of the Moderate range. The average calculated range BIR's, for the detected chrysotile bundles from the powder samples for CSM PLM method had a range of **0.005 to 0.017** which falls in the LOW end of BIR to the low end of Moderate classifications when done by calculation.

The BIR difference between fibrous talc and chrysotile, as demonstrated by MAS, is also verified by the EPA in their 600/R-93/116 PLM methodology document as shown in Table 2-2, page 21.

Table 2-2, "Optical Properties of Asbestos Fibers", provides four sets of refractive indexes measured from chrysotile bundles that have an overall average BIR of 0.011. In that same table, EPA published a range chrysotile BIR's of 0.004 to 0.017 (Low to moderate). This BIR range reported by EPA, was from the Maximum and Minimum values obtained from references 2, 11, 12, and 18 located in Section 2.2.

The method that EPA used for the BIR was to subtract the highest alpha from the highest gamma, then subtract the lowest alpha from the lowest gamma. The EPA referenced BIR

method, is the same way that MAS determined the BIR for the chrysotile bundles found in the J&J talcum powder samples reported here.

The EPA R93 protocol also provides RI and BIR data for both fibrous talc and Flat Cellulose Ribbons that can be found in their Table 2.5. For the RI's of fibrous talc example, EPA reports refractive index 1.600-1.540 with a measured BIR of 0.06, and for cellulose ribbons, the reported EPA RI's are 1.580-1.530 with a measured BIR of 0.05 as shown in Table 9.

Table 9
EPA-R93: Optical Properties of Selected Fibers
Fibrous Talc & Cellulose Ribbons

Fiber Type	RI Parallel/Perpendicular	BIR Calculations
Fibrous Talc	1.600-1.540	0.060 "High"
Cellulose	1.580-1.530	0.050 high end of Moderate

In summary, this data demonstrates that the reported chrysotile bundles in the J&J talcum powder container samples analyzed by MAS have both the appropriate range of refractive indexes and BIR demonstrating that chrysotile asbestos was correctly identified in each container samples, and it also demonstrates that fibrous talc particles or talc plates on edge were not misidentified as chrysotile.

CSM PLM Validation Procedure for CSM Sample Preparation Method

J&J MDL Talcum Powder Sample Totals

The February 1, 2019 MDL Supplement Report for the historical J&J talcum powder products (JBP & STS) analysis demonstrated that both the Italian and the Vermont mines, that J&J sourced their talcum powder from, contained significant amounts of amphibole asbestos (tremolite & anthophyllite/cummingtonite). Additionally, the 15 MDL historical Imerys talc ore samples sourced from their Vermont mine, were found to contained tremolite asbestos. The Imerys historical retains were samples of mostly West Windsor Grade 66 which was the product that J&J used for JBP and STS form the late 1960s to 2003.

Between the MDL historical and non-historical J&J talcum powder products, along with the retain samples, MAS has analyzed a total of 118 J&J talcum powder from the Italian, Vermont and Chinese talc mine sources. The following is a breakdown between the three talc mines for the number of talc samples from each mine, that MAS has analyzed along with the number of positive samples for each group.

1960 to 1968: Italian Historical J&J Containers: of the **14 analyzed, 7 were positive (50%)** asbestos

1968 to 2003: Vermont Historical J&J Containers: of the **36 samples analyzed, 29 were positive (81%)** for asbestos

1968 to 2003: Vermont Historical Imerys Retains: of the **15 samples analyzed, 8 were positive (53%)** for asbestos

1968 to 2003: Vermont Non-historical J&J Containers: of the **3 samples analyzed, 3 were positive (100%)** for asbestos

2003 to 2021: Chinese Non-historical J&J Containers: of the **43 samples analyzed, 40 were positive (93%)** for asbestos

2003 to 2021: Chinese Historical J&J/Imerys Retains: of the **11 samples analyzed, 11 were positive (100%)** for asbestos

All total, for the three talc mine sources that supplied J&J talcum powder for their two body powder products sold in the United States, MAS has analyzed **96 containers of J&J talcum powder products** that had detectable concentrations **of asbestos in 82%** of the containers. Additionally, the **26 historical talc oar samples that MAS has analyzed**, that was sourced from the Vermont and Chinese talc mines, found **73% positive for asbestos**.¹³

¹³ MAS Chart of J&J Testing (Current as of September 16, 2021)

Table 1
JBP Talcum Powder Sample Container Descriptions

	MAS Sample No.	Sender	Date of Manufacture	Sample size (oz)	Source of Sample	ATEM Amphibole Asbestos	PLM Amphibole Asbestos %	CSM Chrys %
1	M66514-001	GPB	Circa 1980	9 oz.	Carolyn Weirick	247,000 s/g anthophyllite	N/A	N/A
2	M70484-001	SGP	1994	15 oz.	Linda Zimmerman	NAD	NAD	0.01-0.10%
3	M71046-001	GPB	1996	9 oz.	Marie Colley	NAD	NAD	0.002-0.01%

These three additional Vermont sourced JBP samples were all found to be positive for either amphibole asbestos or chrysotile.

J&J Chinese Talc Source Container Analysis

Tables 2 thru 6 provides the J&J sample information and analytical results for the 40 JBP containers were talcum powder was sourced from China.

8	M68379-002	SGPB	2004	JoAnne Anderson	7,160 s/g Tremolite	N/A	N/A		

Table 3
J&J Talcum Powder Sample Container Descriptions and Analysis Results
Samples 9 thru 16

	MAS Sample No.	Sender	Date of Manufacture	Source of Sample	ATEM Amphibole Asbestos	PLM Amphibole Asbestos %	CSM Chrys %
9	M66352-001	Lanier JBP	2012	Krystal Kim	NAD	N/A	N/A
10	M66352-002	Lanier JBP	2014	Krystal Kim	17,200 s/g	N/A	N/A
11	M68483-001	SGPB JBP	2012	Nancy Cabibi	NAD	N/A	N/A
12	M67420-001	#1 Lanier JBP	2017	off the shelf Imperial Westwood	NAD	N/A	0.0002-0.0008% 428,000 bundles/g
13	M67420-002	#2 Lanier JBP	2017	off the shelf Imperial Westwood	NAD	N/A	0.0002-0.0006% 489,000 bundles/g

22	M71166-001	MAS JBP	2018	off the shelf CVS	N/A	NAD	0.0015-0.0017		
23	M71166-001	MAS JBP	2019	off the shelf CVS	N/A	NAD	0.001-0.003%		
24	M71166-001	MAS JBP	2019	off the shelf Walgreens	N/A	NAD	0.001-0.003%		

Table 5

J&J Talcum Powder Sample Container Description & Analysis

Samples 25 thru 32

	MAS Sample No.	Sender	Date of Manufacture	Source of Sample	ATEM Amphibole Asbestos	PLM Amphibole Asbestos %	CSM Chrys %
25	M71180-001	HFM JBP	2020	off the shelf Target	N/A	NAD	0.002-0.003%
26	M71211-001	Weitz JBP	2019	off the shelf Holly Johnson-Walmart	N/A	N/A	0.001-0.002%
27	M71211-002	Weitz JBP	2019	off the shelf	N/A	N/A	0.001-0.002

Table 6
J&J Talcum Powder Sample Container Description & Analysis
Samples 33 thru 42

	MAS Sample No.	Sender	Date of Manufacture	Source of Sample	ATEM Amphibole Asbestos	PLM Amphibole Asbestos %	CSM Chrys %
33	M71180-008	Weitz JBP	2019	off the shelf Holly Johnson Walmart	N/A	N/A	0.001-0.002%
34	M71211-009	Weitz JBP	2019	off the shelf Holly Johnson-Walmart	N/A	N/A	0.001-0.002%
35	M71211-10	Weitz JBP	2019	off the shelf Holly Johnson-Walmart	N/A	N/A	0.001-0.002
36	M71216-001	Kazan JBP	2019	off the shelf Lucky	N/A	N/A	0.001-0.002% 273,000 bundles/g
37	M71216-002	Kazan JBP	2019	off the shelf Lucky	N/A	N/A	0.0009-0.001% 254,000 bundles/g
38	M71241-001	MAS JBP	2018	off the shelf Ralphs	N/A	N/A	0.0007-0.001% 168,142 bundles/g

Table 7
J&J and Imerys Guangxi Chinese Retains
Analysis for Asbestos
Samples 1 thru 11

	MAS Sample No.	Sender SGP	Imerys Ore Lot	BV/RIL Sample ID	ATEM Amphibole Asbestos	PLM Amphibole Asbestos %	CSM Chrys %
1	M71109-001	Imerys Mine Seagrave	N/A	BV #A5152004-006A	NAD	NAD	0.001-0.002%
2	M71110-001	Imerys Mine Sanchez	N/A	RJLG No. 3136120	NAD	NAD	0.001-0.002%
3	M71111-001	J&J Retain	MVN C01315C2	RJLG No. 3138491	NAD	NAD	0.001%
4	M71111-002	J&J Retain	MVN S0246C2	RJLG No. 313455	NAD	NAD	0.001%
5	M71111-003	J&J Retain	MVN S0246C2	RJLG No. 3140762	NAD	NAD	0.001%
6	M71111-004	J&J Retain	MVN S0246C2	RJLG No. 3141790	NAD	NAD	0.0008-0.001%

Exhibit 29

VITAE

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Professional Work History

2019 to Present Principal Consulting Scientist, ASPEX, LLC, Lawrenceville, GA

2017 to 2019 Chief Science Officer, Senior Consulting Scientist, and Technical and Quality Director for Microbiologicals, MAS, LLC, Suwanee, GA

2013 to 2017 Laboratory Manager, Senior Consulting Scientist, Technical and Quality Director for Microbiologicals, MAS, LLC, Suwanee, GA

2006 to 2013 Senior Consulting Scientist, Technical and Quality Director for Microbiologicals, MAS, LLC, Suwanee, GA

2004 to 2006 Senior Consulting Scientist, Technical and Quality Director for Microbiologicals, Materials Analytical Services, Inc., Suwanee, GA

2002 to 2004 Vice President, Materials and IH Group Director, Materials Analytical Services, Inc, Suwanee, GA

1996 to 2002 Vice President and Materials Group Director, Materials Analytical Services, Inc, Suwanee, GA

1993 to 1995 Vice President and Director of Biological Services, Materials Analytical Services, Inc, Norcross, GA

1990 to 1993 Branch Manager and Director of Biological Services, Materials Analytical Services, Inc., Norcross, GA

1989 to 1990 Director of Biological Services, Materials Analytical Services, Inc., Norcross, GA

1987 to 1989 Senior Applications Specialist, RMC, Inc. Tucson, AZ

1986 Director, SCRS Analyticals, Monroe, GA. Instructor, Biology Department, Emory University, Atlanta, GA

1985 to 1986 Postdoctoral Research Associate, Department of Microbiology, University of Georgia, Athens, GA

1978 to 1985 Research Technician, The University of Georgia Department of Microbiology, Department of Agronomy, Department of Science Education

Publications

Tran, T, Egilman, D, Rigler, M, Emory, T. A (2021) Critique of Helsinki Criteria for Using Lung Fiber Levels to Determine Causation in Mesothelioma Cases. Annals of Global Health. ; 87(1): 73, 1–13.

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Confirming Problematic Domestic and Chinese Drywall (CDW). Session: Assessment and Control of Chinese Drywall Emissions. Presented at the American Industrial Hygiene Association's Round Table, May 24, 2010, Denver, Colorado.

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Identifying and Quantifying Particulates in Human Lung By Electron Microscopy. Electron Microscopy for Industrial Hygiene Applications. Presented at the American Industrial Hygiene Association's Professional Development Course, May 8, 2004, Atlanta, Georgia.

Mold Investigations, A perspective of the investigator. At the invitation of the Georgia Local Section of the American Industrial Hygiene Association, Atlanta, GA, October 3, 2003

Environmental Audits. Southeastern Regional Conference on Mold, Lead, Healthy Homes and Children's Environmental Health, Atlanta, GA, November 6-8, 2002

Mold and Fungi in Buildings. Assessing Mold and Mildew Damage. At the invitation of MACTEC Companies, Atlanta, GA, September 19, 2002

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bile, a freeze fracture study. Annual Meeting of the Southeastern Electron Microscopy Society, Charleston, SC, May 19-21, (1982).

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Ultra-rapid Freezing Methods and Cryoultramicrotomy, Southeastern Electron Microscopists Society, Athens, GA 1988.

Freeze Fracture Cytochemistry. At the invitation of George Washington School of Medicine by Fred Lightfoot, Department of Anatomy, Washington, DC. July 1988.

Ultra-rapid Freezing Methods and Cryoultramicrotomy, Florida Society for Electron Microscopy, Tampa, FL. 1987.

An Ultrastructural View of Fat Digestion. Philadelphia Children's Hospital at the request of Yi Fu Shiau, M.D. and Peter Malete, M.D. of the Gastroenterology Section, Philadelphia V.A. Medical Center, Philadelphia, Pennsylvania on November 13, 1985.

Gastrointestinal Fat Digestion. Department of Foods and Nutrition by invitation of Roy J. Martin, Ph.D., University of Georgia, Athens, Georgia on November 4, 1985.

Freeze Fracture. Techniques and Applications. In conjunction with Ivan I. Roth, Ph.D. of the University of Georgia at the invitation of Charles D. Humphrey, Ph.D., Hepatitis Branch, Centers for Disease Control, Atlanta, Georgia on October 21, 1985.

Rigler, M.W., Freeze fracture morphology of some synthetics and naturally occurring triacylglycerols. 39th Annual Meeting of the Electron Microscopy Society of America, Atlanta, GA, August 10-14, (1981).

Rigler, M.W., Freeze etch morphology of some natural and synthetic triglyceride droplets. XVth Annual Regional Lipid Conference, Cashiers, NC, October 22-24, (1980).

Expert Panel Invitations

Invitation by Louisiana Senators A.G. Crowe District 1 and Julie Quinn, District 6 to be on an expert panel regarding Chinese Drywall, Property and Health Effects, St. Tammany Parish Council, Mandeville, LA, September 19, 2009.

Invitation by Louisiana Senators A.G. Crowe District 1 and Julie Quinn, District 6 to be on an expert panel regarding Chinese Drywall, Property and Health Effects, St. Bernard Parish Council, Chalmette, LA, October 14, 2009.

Invitation by Louisiana Senators A.G. Crowe District 1 and Julie Quinn, District 6 to be on an expert panel regarding Chinese Drywall, Property and Health Effects, Slidell, LA, October 21, 2009.

Licenses

Clinical Laboratory Director - Special - State of Georgia 1999 - 2000.

Memberships

American Chemical Society (ACS)
American Industrial Hygiene Association (AIHA)
Southeastern Electron Microscopy Society (SEMS)
American Association for the Advancement of Science (AAAS)
American Society for Microbiology (ASM)

Microscopy Society of America (MSA)
American Society for Testing and Materials (ASTM)
American College of Occupational and Environmental Medicine (ACOEM)
American Conference of Government Industrial Hygienists (ACGIH)

Professional Scientific Committees

2018 - present ASTM D-22 Committee on Air Quality Standards

Reviewer

2006 IICRC S520 Standard and Reference Guide for Professional Mold Remediation

Certificates, Continuing Education, and Training

2016 Fortieth International Good Manufacturing Practices Conference, The University of Georgia, March 10, 2016 Introduction to Pharmaceutical CGMP Quality Systems, Center for Professional Advancement, June 3, 2016

2006 Certified Mold Inspector #CMI-06-2124 Certified Mold Remediation Contractor CMRC #06-2103

2003. Indoor air quality: Fungal spore Identification, December 2003, The McCrone Research Institute, Chicago. IL.

2002 Mold Assessment and Remediation in Buildings, Training Certificate #1297, The Environmental Institute, Atlanta, GA

1997 Potential FMEA for Manufacturing & Assembly Process (Process FMEA) Course Certificate, The Society of Automotive Engineers Professional Development Program, February 27, 1997.

1995 A Comprehensive Review of Indoor Air Quality, Air Quality Sciences, Inc., Atlanta, GA.

1992 Trace Elemental and Surface Analysis, Charles Evans & Associates, Research Triangle Park, Raleigh, NC.

Awards

1981 Presidential Scholarship Award - Electron Microscopy Society of America

1982. Ruska Award - Southeastern Electron Microscopy Society

1984 Student Research Prize, Runner up - American Gastroenterology Association

1985 Sigma XI Ph.D. Research Dissertation Award - University of Georgia Chapter

Consultant

1986 Genentech, Inc., Pharmacology Department, South San Francisco, CA.

1986 Georgia State University, Genetics Department, Atlanta, GA

Editor

1988 Electron Microscopy Hints and Tips. Alabama Electron Microscopy Society.

Editorial Board Member

2020 The Journal of Scientific Practice and Integrity. <https://www.jospi.org>

Exhibit 30

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF NEW JERSEY

IN RE: JOHNSON & JOHNSON
TALCUM POWDER PRODUCTS
MARKETING SALES
PRACTICES, AND PRODUCTS
LIABILITY LITIGATION } MDL NO.16-2738 (FLW) (LHG)

VIDEO-RECORDED DEPOSITION OF
MARK W. RIGLER, PH.D.

February 6, 2019
9:14 a.m.

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Suite 200
Johns Creek, Georgia

Frances Buono, RPR, CCR-B-791

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- - -

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(Reporter disclosure made pursuant to
Article 10.B. of the Rules and Regulations of
the Board of Court Reporting of the Judicial
Council of Georgia.)
(Identification statement by
videographer.)

MARK W. RIGLER, PH.D.,

having been first duly sworn, was examined and
testified as follows:

EXAMINATION

BY MR. CHACHKES:

Q. Good morning, Dr. Rigler.

A. Good morning.

Q. How are you?

A. Good; you?

Q. Good.

MR. CHACHKES: So just for the record, I
have the same late production objections as
yesterday and the same request to keep the
deposition open. I assume you have the same?

MS. O'DELL: We have the same opposition.

Q. (By Mr. Chachkes) Okay. So what I've
done is I've brought some exhibits from yesterday, so
if you're wondering why there's stamps on them, it's
because they're the stamps from Dr. Longo's

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Defendants'
Exhibit

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1 Invoices 204
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(Original Exhibits 1 through 4 have been
attached to the original transcript.)

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1 deposition. We are going to use some of the same
2 exhibits, if that's okay.

A. Yes.

Q. So what's been marked yesterday -- so all
the stamps are February 5, 2019, Longo. And I'm
going to use those exhibits unless I use a new
exhibit.

A. Okay.

Q. So I'm just going to hand you what's been
marked yesterday as Exhibit 2. And you recognize
that as the January 15 version of the report that you
cosigned?

A. Yes.

Q. Okay. And what was your involvement in
drafting this report?

A. I reviewed the report, looked over the
data, and made typographical and grammatical
corrections throughout the report.

Q. Okay. Do you feel qualified to testify to
every matter that's in that report?

MS. O'DELL: Object to the form.

THE WITNESS: As I say, I am qualified to
testify on what's in this report now, yes.

Q. (By Mr. Chachkes) Okay. So if Dr. Longo
were to, for example, not show up at a trial, you

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09:16:20 **1** could testify to everything that you could testify
 09:16:21 **2** to?
 09:16:22 **3** **A.** Well, I'm not Dr. Longo, of course.
 09:16:26 **4** However, I can testify as to what's in this report,
 09:16:29 **5** yes.
 09:16:29 **6** **Q.** Okay. To what degree is Dr. Longo more
 09:16:33 **7** qualified about something in that report than you?
 09:16:36 **8** **A.** Dr. Longo has a degree in materials
 09:16:39 **9** science, and my degree is in microbiology, my Ph.D.
 09:16:44 **10** So he has more experience in the materials area, so I
 09:16:53 **11** would, you know, defer to him on those topics.
 09:16:57 **12** **Q.** Okay. Well, there's no microbiology in
 09:17:01 **13** the report; right?
 09:17:02 **14** **A.** Not that I know of, no. But there are
 09:17:04 **15** microscopic things in the report, and that's one of
 09:17:07 **16** my areas of qualification, electron microscopy and
 09:17:12 **17** the microscopic world, if you will.
 09:17:14 **18** **Q.** So that's sort of a comparison of your
 09:17:16 **19** relative expertise. What about your relative ability
 09:17:19 **20** to talk about substantive matters, data, you know,
 09:17:23 **21** what analysts did? Is there any difference there
 09:17:26 **22** between you and Dr. Longo?
 09:17:27 **23** **A.** Well, Dr. Longo is the head of the
 09:17:31 **24** laboratory, so I would defer to him on a number of
 09:17:35 **25** those areas, and specific areas.
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09:17:38 **1** **Q.** Okay. For example?
 09:17:39 **2** **A.** Well, for example, there may be some
 09:17:42 **3** situations where he directed the study and that
 09:17:49 **4** would -- I would defer those things to him.
 09:17:51 **5** **Q.** Did you direct any of the studies in that
 09:17:54 **6** report?
 09:17:54 **7** **A.** As far as me directing the studies in
 09:17:57 **8** here, that was mainly Dr. Longo.
 09:17:58 **9** **Q.** Okay. What studies in there did you
 09:18:02 **10** direct?
 09:18:03 **11** **A.** Again, they were mainly directed by
 09:18:06 **12** Dr. Longo.
 09:18:06 **13** **Q.** You say mainly. I'm just wondering is
 09:18:09 **14** there anything left over that you directed?
 09:18:11 **15** **MS. O'DELL:** Object to the form.
 09:18:12 **16** **THE WITNESS:** In terms of the study
 09:18:16 **17** process, originally we conferred on it in the
 09:18:20 **18** very beginning, but Dr. Longo was the one who
 09:18:24 **19** mainly carried out the processes and direction
 09:18:28 **20** of the studies.
 09:18:29 **21** **Q.** (By Mr. Chachkes) Okay. So the
 09:18:31 **22** conceptualization of the experimental procedures you
 09:18:35 **23** participated, but in the actual execution you did not
 09:18:38 **24** participate?
 09:18:39 **25** **MS. O'DELL:** Object to the form.
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09:18:40 **1** **THE WITNESS:** Well, in terms of looking at
 09:18:42 **2** data, quality control issues, that type of
 09:18:45 **3** thing, which would be part of the study, I would
 09:18:47 **4** say, yes, I was part of that.
 09:18:49 **5** **Q.** (By Mr. Chachkes) Okay. So the actual
 09:18:51 **6** experimentation process, the -- people call it wet
 09:18:54 **7** work; are you familiar with that?
 09:18:55 **8** **A.** Yes.
 09:18:56 **9** **Q.** Okay. So the actual experimental process
 09:18:58 **10** and the wet work, you did not participate in that?
 09:19:01 **11** **A.** Again, Dr. Longo directed those activities
 09:19:06 **12** in this study; and again, I will defer those things
 09:19:10 **13** to him, you know, if -- once we get to those topics
 09:19:14 **14** and we talk about those topics, because right now
 09:19:17 **15** we're talking about things in general.
 09:19:18 **16** **Q.** I'm not asking about Dr. Longo. I'm
 09:19:20 **17** asking about you.
 09:19:20 **18** **A.** Sure.
 09:19:21 **19** **Q.** What in the report -- which experiments
 09:19:23 **20** did you participate in, if any?
 09:19:24 **21** **A.** I told you in the beginning what I did
 09:19:28 **22** here, which was mainly review the data, review the
 09:19:31 **23** report for typographical or grammatical errors, also
 09:19:36 **24** checking data, that type of thing.
 09:19:38 **25** **Q.** So can you confirm you did not participate
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09:19:41 **1** in the actual experimenting that's reported on in the
 09:19:44 **2** exhibit?
 09:19:44 **3** **MS. O'DELL:** Object to the form.
 09:19:47 **4** **THE WITNESS:** Again, I was part of the
 09:19:48 **5** study working on part of the study, so I
 09:19:50 **6** consider myself as someone who participated in
 09:19:53 **7** the study.
 09:19:53 **8** **Q.** (By Mr. Chachkes) Okay. So --
 09:19:55 **9** **A.** That's the way it works in the laboratory.
 09:19:57 **10** **Q.** Let's be more specific.
 09:19:58 **11** **A.** Sure.
 09:19:59 **12** **Q.** So you understand what an experiment is;
 09:20:04 **13** right?
 09:20:04 **14** **MS. O'DELL:** In what context?
 09:20:07 **15** **THE WITNESS:** Yeah, in what context?
 09:20:08 **16** **Q.** (By Mr. Chachkes) Okay. So you're
 09:20:09 **17** unclear on what an experiment is?
 09:20:11 **18** **A.** No, I'm not unclear on what an experiment
 09:20:13 **19** is. I'm wondering what you're asking as far as your
 09:20:15 **20** question.
 09:20:15 **21** **Q.** What does the word experiment mean to you?
 09:20:17 **22** **A.** Well, it would be a set of tests after
 09:20:21 **23** coming up with a hypothesis about a particular
 09:20:23 **24** situation what the questions are.
 09:20:25 **25** **Q.** Let's use your definition. Were you
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09:20:26 **1** involved in any experiments where you were actually
 09:20:29 **2** testing -- testing -- J&J bottles of talc?
 09:20:35 **3** **A.** I was not -- I was not handling and
 09:20:39 **4** testing the talc myself. Our analysts in the
 09:20:42 **5** laboratory were directed to do that.
 09:20:44 **6** **Q.** Did you ever use a PLM for the purposes of
 09:20:48 **7** this report?
 09:20:49 **8** **A.** No, I did not.
 09:20:50 **9** **Q.** Did you ever use a TEM for the purposes of
 09:20:52 **10** this report?
 09:20:53 **11** **A.** Not for the purposes of this report.
 09:20:55 **12** **Q.** Did you ever use an XRD device for the
 09:20:59 **13** purposes of this report?
 09:21:01 **14** **A.** We do not have the XRD device or that type
 09:21:04 **15** of device at our laboratory.
 09:21:06 **16** **Q.** Did you ever do an SAED experiment for the
 09:21:08 **17** purposes of this report?
 09:21:10 **18** **A.** Again, same answer as with the TEM.
 09:21:13 **19** **Q.** So that's a no?
 09:21:15 **20** **A.** Correct.
 09:21:16 **21** **Q.** Okay. And did you ever do EDXA work
 09:21:21 **22** experiments on J&J bottles of talc for this report?
 09:21:24 **23** **A.** That would be the same answer.
 09:21:26 **24** **Q.** Which is a no?
 09:21:26 **25** **A.** Yes.

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09:22:48 **1** done, you had the data?
 09:22:49 **2** **A.** Well, then I would review the data, go
 09:22:54 **3** through the data, and then see again if it met the QC
 09:22:59 **4** qualifications.
 09:23:01 **5** **Q.** Okay. Anything else that you did once the
 09:23:03 **6** data was done?
 09:23:04 **7** **A.** Not that I can recall as I sit here.
 09:23:09 **8** **Q.** Okay. During any of the experiments did
 09:23:13 **9** you sit over the shoulder of any analyst and watch
 09:23:17 **10** the work they were doing?
 09:23:18 **11** **A.** Yeah. I'm at the laboratory mostly on a
 09:23:23 **12** daily basis, so I was able to go in and look and see
 09:23:25 **13** what analysts were doing at any particular time.
 09:23:28 **14** **Q.** Okay. Were you substantively contributing
 09:23:33 **15** at those moments when you were looking at what
 09:23:35 **16** analysts were doing?
 09:23:36 **17** **A.** What do you mean by that?
 09:23:37 **18** **Q.** Well, were you telling them to change
 09:23:41 **19** their behavior or to do something that they weren't
 09:23:43 **20** otherwise going to do? Anything that affected their
 09:23:46 **21** experimental work?
 09:23:47 **22** **MS. O'DELL:** Object to the form.
 09:23:48 **23** **THE WITNESS:** No. No.
 09:23:48 **24** **Q.** (By Mr. Chachkes) And so you're an
 09:23:52 **25** employee of MAS?

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09:21:27 **1** **Q.** And did you -- let's -- so once the
 09:21:36 **2** experiments were done and you saw the data, did you
 09:21:39 **3** do any substantive contribution to the report other
 09:21:46 **4** than correct typos?
 09:21:47 **5** **MS. O'DELL:** Object to the form.
 09:21:48 **6** **THE WITNESS:** In terms of looking at what
 09:21:50 **7** was done during the study and working with the
 09:21:55 **8** TEM manager on the study and the quality
 09:21:59 **9** control, yes.
 09:22:00 **10** **Q.** (By Mr. Chachkes) Okay. So can you be
 09:22:02 **11** more specific? So you did quality control. What's
 09:22:04 **12** that?
 09:22:04 **13** **A.** Well, I monitored the reporting that was
 09:22:08 **14** done in terms of what samples were analyzed, what
 09:22:12 **15** replicates, duplicates, and blanks that would be
 09:22:16 **16** tested in terms of what were necessary for us to meet
 09:22:20 **17** the QC standards.
 09:22:22 **18** **Q.** Okay. And who set the QC standards?
 09:22:25 **19** **A.** Well, the QC standards are set by NVLAP
 09:22:30 **20** NIST, the National Institutes of Standard and
 09:22:34 **21** Technology, for TEM labs that are analyzing for
 09:22:36 **22** asbestos.
 09:22:36 **23** **Q.** Other than ensure that folks complied with
 09:22:42 **24** the QC standards, what did you do?
 09:22:46 **25** So let's say after the experiments were

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09:23:53 **1** **A.** Yes.
 09:23:53 **2** **Q.** How long have you been an employee there?
 09:23:55 **3** **A.** Over 30 years.
 09:23:57 **4** **Q.** Let's go back to the report. Are there
 09:24:04 **5** any sections of the report that you can say you
 09:24:06 **6** didn't work on?
 09:24:08 **7** **MS. O'DELL:** Object to the form.
 09:24:09 **8** **THE WITNESS:** I would have to look. If
 09:24:14 **9** you're talking about the reports in front of me
 09:24:16 **10** here --
 09:24:17 **11** **Q.** (By Mr. Chachkes) Yes, the January 15
 09:24:19 **12** expert report for the MDL.
 09:24:20 **13** **A.** The J3 portions of the report.
 09:24:24 **14** **Q.** And you would say you had some involvement
 09:24:26 **15** in all other portions?
 09:24:28 **16** **A.** In other portions, yes.
 09:24:29 **17** **Q.** How much time did you devote to the work
 09:24:32 **18** underlying this report and the report itself?
 09:24:34 **19** **A.** I didn't keep track of it. I have no
 09:24:39 **20** idea.
 09:24:39 **21** **Q.** Over 10 hours?
 09:24:41 **22** **A.** Probably over 10 hours.
 09:24:42 **23** **Q.** Over 20 hours?
 09:24:43 **24** **A.** Again, that would be a guesstimate. I
 09:24:45 **25** don't know beyond that.

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09:24:47 **1** Q. More than 15 hours?

09:24:48 **2** A. I don't know.

09:24:49 **3** Q. So probably over 10 hours, but you don't

09:24:52 **4** know beyond that?

09:24:52 **5** A. Correct.

09:24:53 **6** Q. Okay. And were you involved in the

09:24:58 **7** creation of the protocols to test J&J talc in this

09:25:03 **8** case?

09:25:04 **9** A. In terms of the protocols for the testing,

09:25:09 **10** we used standard methods throughout for the analysis.

09:25:14 **11** Dr. Longo essentially put together the way the test

09:25:18 **12** or the study was going to be done, but we, you know,

09:25:21 **13** overall use the standard methods throughout.

09:25:23 **14** Q. When you say Dr. Longo put together the

09:25:26 **15** way -- you said the way the studies would be

09:25:28 **16** conducted?

09:25:29 **17** A. Yes.

09:25:29 **18** Q. Was that something in writing?

09:25:31 **19** A. Well, he directs the study on a daily

09:25:35 **20** basis.

09:25:35 **21** Q. The question is was it in writing?

09:25:38 **22** A. Was it in writing? I don't know. You'd

09:25:42 **23** have to ask Dr. Longo.

09:25:43 **24** Q. Okay. So you're unaware of whether he

09:25:46 **25** communicated with the analysts about protocol in
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09:26:49 **1** Q. Do you consider yourself an expert in TEM

09:26:56 **2** analysis?

09:26:56 **3** A. Well, the term expert, I think, you

09:27:00 **4** probably have to defer that to the court. I mean, I

09:27:04 **5** have more than the layperson's knowledge so -- but I

09:27:08 **6** would defer that to the court.

09:27:10 **7** Q. Okay. Have you --

09:27:13 **8** A. I mean, I've been qualified as an expert

09:27:16 **9** before, but in this case...

09:27:19 **10** Q. When is the first time you ever used a

09:27:21 **11** TEM?

09:27:21 **12** A. The first time I used a TEM? Let's see.

09:27:24 **13** That would probably have been sometime in the early

09:27:29 **14** '80s, I would say, yeah.

09:27:31 **15** Q. How many times have you used an SAED to

09:27:35 **16** characterize a particle?

09:27:36 **17** A. SAED?

09:27:37 **18** Q. SAED.

09:27:39 **19** A. I don't know if I could count the number

09:27:40 **20** of times.

09:27:41 **21** Q. How many times have you used EDXA to

09:27:45 **22** characterize a particle?

09:27:47 **23** A. Same answer on that. Yes.

09:27:48 **24** Q. What about PLM, do you consider yourself

09:27:53 **25** an expert on PLM?
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09:25:48 **1** writing?

09:25:49 **2** A. Well, the --

09:25:50 **3** MS. O'DELL: Object to form.

09:25:51 **4** THE WITNESS: -- laboratory has protocol

09:25:52 **5** for the way that talc is analyzed and

09:25:59 **6** asbestos-bearing products are analyzed, so we

09:26:01 **7** have written protocol for those things.

09:26:03 **8** MR. CHACHKES: Okay. And I think I've

09:26:06 **9** requested that those be produced. I don't think

09:26:07 **10** those have been produced.

09:26:09 **11** MS. O'DELL: I think it's reflected in his

09:26:11 **12** report, but we will consider your request.

09:26:13 **13** Q. (By Mr. Chachkes) Okay. Do you

09:26:21 **14** communicate with the analysts by email at all?

09:26:23 **15** A. Communicate with the analysts by email?

09:26:26 **16** No. I can go speak to them.

09:26:29 **17** Q. Okay. There's no sort of like weekly

09:26:33 **18** email or monthly email where you summarize what's

09:26:36 **19** going on?

09:26:37 **20** A. No.

09:26:37 **21** Q. Did you ever change an analyst's

09:26:42 **22** determinations where an analyst came up with some

09:26:44 **23** conclusion and you said maybe that's not right, go

09:26:46 **24** back?

09:26:47 **25** A. No.
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09:27:54 **1** A. I am not a PLM microscopist.

09:27:56 **2** Q. Okay. What was your contribution to the

09:27:58 **3** PLM aspects of the January 15 report?

09:28:03 **4** A. Well, as far as PLM contributions, again,

09:28:07 **5** I'm not the PLM analyst, so we just wanted to be sure

09:28:13 **6** that the quality program was being followed in the

09:28:18 **7** laboratory.

09:28:18 **8** Q. When you say that a quality program was

09:28:21 **9** being followed, is that the same contribution you

09:28:31 **10** made to the other portions of the report?

09:28:33 **11** MS. O'DELL: Object to form.

09:28:34 **12** THE WITNESS: Yes. Well, I would say yes

09:28:35 **13** to that. Yes.

09:28:36 **14** Q. (By Mr. Chachkes) Okay. Did you ever

09:28:43 **15** personally test a talc sample for asbestos

09:28:45 **16** contamination?

09:28:46 **17** A. Did I ever personally test them?

09:28:48 **18** Q. Yes.

09:28:48 **19** A. Not that I can recall as I sit here.

09:28:50 **20** Q. Okay.

09:28:55 **21** A. We've done tissue testing for talc and

09:29:00 **22** asbestos in tissue, yes.

09:29:01 **23** Q. But just testing talcum powder that came

09:29:05 **24** out of a bottle, you've never done that?

09:29:07 **25** A. I've not personally tested that.
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09:29:09 **1** Q. You have an undergraduate degree in
 09:29:21 **2** biology?
 09:29:21 **3** A. Yes.
 09:29:21 **4** Q. And a Ph.D. in microbiology?
 09:29:24 **5** A. Yes.
 09:29:24 **6** Q. Did you take any geology courses at any
 09:29:27 **7** point in your education?
 09:29:27 **8** A. No, but at the University of Georgia one
 09:29:31 **9** of my very good friends in graduate school was a
 09:29:34 **10** geologist, and we discussed a lot of issues
 09:29:38 **11** surrounding the phyllosilicates. He was a kaolin
 09:29:44 **12** person. He was a clay person.
 09:29:44 **13** In Georgia we have a lot of red clay, and
 09:29:46 **14** so that was one of his areas that he enjoyed, and I
 09:29:51 **15** learned quite a bit from him. Very strong geology
 09:29:56 **16** department at the University of Georgia.
 09:29:57 **17** Q. Other than talking to a friend about
 09:29:59 **18** geology, do you have any formal geology education?
 09:30:03 **19** MS. O'DELL: Object to form.
 09:30:04 **20** THE WITNESS: No.
 09:30:04 **21** Q. (By Mr. Chachkes) Did you take any
 09:30:06 **22** mineralogy courses during any part of your
 09:30:07 **23** educations?
 09:30:07 **24** A. It's interesting because in the electron
 09:30:11 **25** microscopy courses that you take, the substances that
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09:30:17 **1** we analyzed, you know, varied from biological
 09:30:20 **2** substances to mineralogical substances. So you would
 09:30:24 **3** get a portion of that with that training, and I got
 09:30:27 **4** some of that.
 09:30:28 **5** Q. Okay. Have you ever physically analyzed a
 09:30:33 **6** mineral under a microscopy technique?
 09:30:36 **7** A. I, again, think the answer to that is I
 09:30:41 **8** have sat with the analysts, that includes the PLM
 09:30:46 **9** analysts, watched them do the work, and participated
 09:30:51 **10** that way in terms of the -- that kind of an analysis.
 09:30:55 **11** Q. Other than watching other people analyze
 09:30:57 **12** minerals under microscopy techniques, have you any
 09:31:01 **13** experience analyzing minerals under microscopy
 09:31:03 **14** techniques?
 09:31:03 **15** A. Well, by electron microscopy in terms of
 09:31:09 **16** seeing these minerals and having run into them during
 09:31:13 **17** an analysis. And again, I've been doing electron
 09:31:17 **18** microscopy since the '80s, so the tissue analysis
 09:31:21 **19** that I've done in the past we've come across, you
 09:31:26 **20** know, mineral types and there's tissues and how to
 09:31:28 **21** analyze those. So I've done that in tissue samples
 09:31:32 **22** at the optical or the bulk PLM level very limited,
 09:31:37 **23** say.
 09:31:37 **24** Q. Okay. Have you ever personally run a
 09:31:39 **25** microscopy analysis of minerals that aren't in
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09:31:44 **1** tissue?
 09:31:45 **2** A. Yes.
 09:31:48 **3** Q. Can you explain?
 09:31:49 **4** A. Again, at MAS I've had a variety of roles
 09:31:55 **5** from the early '90s when I was hired there; and MAS
 09:32:02 **6** is a materials characterization laboratory, so I
 09:32:06 **7** worked on hundreds of different kinds of projects
 09:32:09 **8** using microscopy and gas chromatography, all kinds of
 09:32:15 **9** chemical techniques.
 09:32:16 **10** So I have run into situations where I've
 09:32:18 **11** examined minerals that have been in materials such as
 09:32:22 **12** plastics or polymers, for instance, where we have
 09:32:25 **13** done cutting or thin sectioning of that kind of
 09:32:29 **14** material, and you would look at the inclusions in the
 09:32:32 **15** polymers because they are -- they're additives, they
 09:32:36 **16** may be for a variety of different reasons, and then
 09:32:39 **17** you end up analyzing them or seeing them. And this
 09:32:43 **18** was mostly by SEM or TEM.
 09:32:46 **19** Q. And you personally did those experiments?
 09:32:48 **20** A. Yes, I've personally done those things.
 09:32:50 **21** Q. Have you ever personally done a microscopy
 09:32:52 **22** investigation of a mineral or a solid solution that's
 09:32:56 **23** just mineral or solid solution?
 09:32:59 **24** A. Can you explain a bit more?
 09:33:01 **25** Q. Do you know what a solid solution is?
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09:33:03 **1** A. Yes.
 09:33:03 **2** Q. So, for example, a bottle of talc just
 09:33:06 **3** contains minerals; right?
 09:33:08 **4** A. Yes.
 09:33:08 **5** Q. Okay. So have you ever --
 09:33:09 **6** MS. O'DELL: Object to the form.
 09:33:10 **7** Q. (By Mr. Chachkes) -- personally done a
 09:33:12 **8** microscopy analysis of something that just contains
 09:33:15 **9** minerals, doesn't contain anything else like plastics
 09:33:18 **10** or other things?
 09:33:19 **11** A. Well, I think if you look at it from the
 09:33:23 **12** viewpoint of if you have a plastic or whatever it may
 09:33:29 **13** be and a mineral inclusion in there, you're looking
 09:33:31 **14** at the mineral, you know, aside from the other
 09:33:33 **15** polymeric material that's there. So the answer to
 09:33:36 **16** that is yes. And as far as a solid solution series
 09:33:39 **17** mineral, yes.
 09:33:40 **18** Q. Okay. I want to be clear what you're
 09:33:42 **19** answering because you've talked about plastics, and
 09:33:44 **20** my question was saying expressly exclude those. So
 09:33:47 **21** let me ask it again just to make sure I have a clear
 09:33:50 **22** answer.
 09:33:50 **23** A. All right.
 09:33:50 **24** Q. Have you ever personally done a microscopy
 09:33:53 **25** analysis of minerals and only minerals, where it's
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09:33:57 **1** just minerals you're looking at?

09:33:58 **2 A.** The answer to that is yes.

09:34:00 **3 Q.** Okay. Can you give me an example?

09:34:02 **4 A.** Again, I will go back to studies that

09:34:06 **5** we've done on client samples over the years, most of

09:34:10 **6** them being particulate types of samples. In the

09:34:13 **7** early days when I came to MAS, we were looking at a

09:34:16 **8** lot of asbestos-bearing materials. So part of my

09:34:21 **9** training at the company was looking at those

09:34:24 **10** materials by SEM or TEM.

09:34:26 **11 Q.** Okay. So those asbestos-bearing materials

09:34:28 **12** were only minerals, the -- you say asbestos-bearing,

09:34:32 **13** but the thing that was bearing them was minerals?

09:34:34 **14 A.** Yeah. I mean, if you're looking at

09:34:36 **15** something like vermiculite, you know, pure -- yeah.

09:34:39 **16 Q.** Got it. Did you take any crystallography

09:34:43 **17** courses during your education?

09:34:44 **18 A.** Once again, that's part of the TEM

09:34:47 **19** training that I got.

09:34:48 **20 Q.** Okay. Was the TEM training you got, that

09:34:50 **21** was, I'm sorry, in college?

09:34:52 **22 A.** Yeah, in graduate school.

09:34:53 **23 Q.** Graduate school. Was that a particular

09:34:55 **24** course, or was that just part of your thesis work?

09:34:58 **25 A.** No, that's a course. They had courses in
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09:35:56 **1 A.** No, I'm not a medical doctor.

09:35:57 **2 Q.** Okay. You don't have any medical

09:35:59 **3** training?

09:36:00 **4 A.** Well, the medical training I have is

09:36:03 **5** related to my training as a -- in undergraduate as a

09:36:09 **6** biologist. The curriculum that I took at Villanova

09:36:15 **7** was for premed, and that included courses that

09:36:18 **8** doctors would take prior to medical school, things

09:36:21 **9** like histotechnique, which is the study of how you

09:36:26 **10** prepare tissues, how to prepare and section those

09:36:29 **11** tissues. Also, you know, you would -- I took

09:36:33 **12** comparative anatomy. I taught anatomy at Emory

09:36:38 **13** University for a semester down here in Atlanta.

09:36:42 **14** So I have training in a number of areas

09:36:45 **15** that doctors would have, all the way from neurology

09:36:49 **16** to pathology, that type of thing.

09:36:50 **17 Q.** You're not a statistician?

09:36:52 **18 A.** No. But we use statistics in our work.

09:36:55 **19 Q.** Okay. You're not a geostatistician?

09:36:58 **20 A.** No.

09:36:58 **21 Q.** Have you ever created a method for

09:37:10 **22** microscopy investigation that has been published in a

09:37:15 **23** peer-reviewed publication?

09:37:15 **24 A.** Yes.

09:37:16 **25 Q.** Can you give me an example?
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09:35:01 **1** scanning electron microscopy and transmission

09:35:04 **2** electron microscopy, and those were all part of the

09:35:06 **3** course that you took. You had to learn about

09:35:11 **4** electron optics; you had to learn about how electrons

09:35:14 **5** interact with materials. So that would all be part

09:35:18 **6** of my training.

09:35:19 **7 Q.** Okay. You're not a geologist?

09:35:21 **8 A.** That's correct.

09:35:22 **9 Q.** You're not a mineralogist?

09:35:24 **10 A.** No.

09:35:24 **11 Q.** Okay. You're not a crystallographer?

09:35:28 **12 A.** Well, I know crystallography. But as far

09:35:31 **13** as being a, quote, crystallographer, if there is such

09:35:35 **14** a person that just specializes in that, the answer is

09:35:37 **15** no.

09:35:37 **16 Q.** You're not a certified industrial

09:35:39 **17** hygienist?

09:35:39 **18 A.** Correct.

09:35:39 **19 Q.** You have done exposure assessments;

09:35:42 **20** correct?

09:35:42 **21 A.** Yes.

09:35:42 **22 Q.** Okay. Have you done exposure studies?

09:35:46 **23 A.** The answer to that is I have been involved

09:35:49 **24** in exposure studies, yes.

09:35:51 **25 Q.** Okay. You're not a pathologist?
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09:37:18 **1 A.** I would say we did a study a number of

09:37:24 **2** years ago on the famous Kent Micronite filter. It

09:37:31 **3** was a blue filter that was with -- made by Lorillard

09:37:36 **4** and they put that on cigarettes to essentially be a

09:37:40 **5** filtration device. So that was one that I did.

09:37:44 **6 Q.** Okay.

09:37:45 **7 A.** And that was published.

09:37:46 **8 Q.** Okay. And that was a methodology for

09:37:48 **9** investigating the subject matter?

09:37:50 **10 A.** Yes.

09:37:50 **11 Q.** Okay. What about methodologies for

09:37:57 **12** looking for asbestos in talc?

09:38:03 **13 A.** As far as methodologies for looking for

09:38:05 **14** asbestos in talc, the answer to that is yes.

09:38:07 **15 Q.** Okay. So you've published in the

09:38:08 **16** peer-reviewed --

09:38:09 **17 A.** Oh, I'm sorry, published. No. Not yet.

09:38:11 **18 Q.** Okay. Are you working on something?

09:38:13 **19 A.** Well, I can't confirm or deny that right

09:38:16 **20** now.

09:38:16 **21 Q.** Well, it's a deposition. You have to.

09:38:18 **22 A.** Well, I can --

09:38:19 **23 Q.** Are you working on something right now?

09:38:21 **24 A.** Our experience with publications is that

09:38:26 **25** we don't talk about those things because in the past
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09:38:30 **1** we were working on a publication and somehow, some
 09:38:35 **2** way, some attorney groups got hold of it, and they
 09:38:39 **3** influenced the editor on that document. So we don't
 09:38:43 **4** talk about those things anymore.
 09:38:45 **5** **Q.** Okay. So pending question is: Are you
 09:38:48 **6** working on a publication about finding talc in
 09:38:52 **7** asbestos, and you are refusing to answer?
 09:38:54 **8** **MS. O'DELL:** Object to the form.
 09:38:55 **9** **THE WITNESS:** No.
 09:38:55 **10** **MS. O'DELL:** That's not what he said.
 09:38:56 **11** **Q.** (By Mr. Chachkes) Okay. So are you
 09:38:57 **12** working on a publication about finding talc in
 09:38:59 **13** asbestos?
 09:39:00 **14** **A.** No.
 09:39:00 **15** **MS. O'DELL:** Object to the form.
 09:39:01 **16** **Q.** (By Mr. Chachkes) I'm sorry. Are you
 09:39:02 **17** working on a publication about finding asbestos in
 09:39:04 **18** talc?
 09:39:04 **19** **MS. O'DELL:** Object to the form.
 09:39:05 **20** **THE WITNESS:** I answered the question
 09:39:07 **21** twice.
 09:39:07 **22** **Q.** (By Mr. Chachkes) The answer is yes?
 09:39:09 **23** **A.** I just answered the question twice. I
 09:39:11 **24** said no.
 09:39:11 **25** **Q.** Okay. All right. Are you working on any
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09:39:55 **1** **MS. O'DELL:** The question was asked, and
 09:39:57 **2** the witness answered it.
 09:39:58 **3** **MR. CHACHKES:** Okay.
 09:40:00 **4** **MR. SILVER:** Please note that Imerys will
 09:40:00 **5** be --
 09:40:00 **6** **THE REPORTER:** I'm sorry, I can't hear
 09:40:07 **7** you.
 09:40:07 **8** **MR SILVER:** Imerys will be calling the
 09:40:07 **9** Special Master at the break to have the witness
 09:40:09 **10** compelled to answer the question, but we will
 09:40:13 **11** wait for a break now.
 09:40:14 **12** **Q.** (By Mr. Chachkes) Okay. Has any
 09:40:15 **13** governmental body asked you to test talc?
 09:40:19 **14** **A.** Not that I know of, no.
 09:40:20 **15** **Q.** Has any School of Public Health asked you
 09:40:22 **16** to test talc?
 09:40:23 **17** **A.** School of Public Health, no.
 09:40:25 **18** **Q.** Have you ever taught any courses to train
 09:40:27 **19** microscopists?
 09:40:30 **20** **A.** The answer to that is yes, I've been part
 09:40:33 **21** of some seminars for training.
 09:40:38 **22** **Q.** What seminars?
 09:40:42 **23** **A.** A number of years ago at the American
 09:40:46 **24** Industrial Hygiene Conference there was a session on
 09:40:48 **25** electron microscopy of asbestos-bearing materials and
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 09:39:18 **1** publications about talc that you hope to get into the
 09:39:20 **2** peer-reviewed literature?
 09:39:21 **3** **MS. O'DELL:** Object to the form.
 09:39:22 **4** **THE WITNESS:** I've already answered that
 09:39:25 **5** question before, and I can neither confirm nor
 09:39:31 **6** deny that right now.
 09:39:31 **7** **Q.** (By Mr. Chachkes) Okay. I'll give you
 09:39:32 **8** one more chance. If you would answer the question
 09:39:35 **9** are you working on any publications about talc that
 09:39:37 **10** you intend to put in the peer-reviewed literature,
 09:39:39 **11** and you're refusing to answer?
 09:39:40 **12** **A.** No, I'm not --
 09:39:41 **13** **MS. O'DELL:** Object to the form.
 09:39:43 **14** **THE WITNESS:** I'm not refusing to answer.
 09:39:45 **15** I've already answered.
 09:39:45 **16** **Q.** (By Mr. Chachkes) Your answer is you can
 09:39:47 **17** neither confirm nor deny?
 09:39:49 **18** **A.** Correct.
 09:39:50 **19** **Q.** And that's different from a refusal to
 09:39:51 **20** answer?
 09:39:51 **21** **MS. O'DELL:** Yes.
 09:39:50 **22** **THE WITNESS:** No, that's an answer.
 09:39:51 **23** **MR. CHACHKES:** Okay. And so, Counsel,
 09:39:51 **24** that's your position, you're going to not allow
 09:39:54 **25** that question?
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 09:40:52 **1** I had a session in that.
 09:40:53 **2** **Q.** And you taught microscopy techniques to
 09:40:57 **3** the participants?
 09:40:57 **4** **A.** Yes.
 09:40:58 **5** **Q.** Have you ever attended a McCrone training
 09:41:05 **6** or testing class?
 09:41:06 **7** **A.** The answer to that is yes.
 09:41:07 **8** **Q.** Can you tell me when?
 09:41:08 **9** **A.** The one that I -- wait a minute. Let me
 09:41:11 **10** see if that was McCrone. I think that was -- that
 09:41:17 **11** was a different group for training for mold spore
 09:41:21 **12** analysis.
 09:41:22 **13** **Q.** Okay. So you've tested -- you've tested a
 09:41:24 **14** McCrone class for mold spore analysis?
 09:41:27 **15** **A.** No. It was another group.
 09:41:28 **16** **Q.** Okay. Have you ever attended a McCrone
 09:41:31 **17** testing or training class?
 09:41:32 **18** **A.** Yes.
 09:41:32 **19** **Q.** For asbestos?
 09:41:33 **20** **A.** No. The one that we had, I believe at our
 09:41:37 **21** laboratory, we had them come in. Again, it was for
 09:41:39 **22** mold analysis, mold spore analysis.
 09:41:42 **23** **Q.** Any other McCrone testing or training
 09:41:44 **24** class that you have attended?
 09:41:46 **25** **A.** Not that I can recall as I sit here.
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09:41:48 **1** Q. Okay. Were you consulted by the FDA in
 09:41:53 **2** their recent testing of talc?
 09:41:54 **3** A. No.
 09:41:55 **4** Q. Have you been consulted by any foreign
 09:41:59 **5** bodies about testing of talc?
 09:42:01 **6** MS. O'DELL: Object to the form.
 09:42:02 **7** Q. (By Mr. Chachkes) Foreign countries?
 09:42:04 **8** A. No.
 09:42:05 **9** Q. Has any third-party consulted with you
 09:42:14 **10** about the testing of talc that isn't someone who's
 09:42:17 **11** paying you?
 09:42:18 **12** MS. O'DELL: Object to the form.
 09:42:21 **13** THE WITNESS: Ask the question again.
 09:42:22 **14** Q. (By Mr. Chachkes) Has any third-party --
 09:42:23 **15** has anybody asked you at MAS to consult about testing
 09:42:26 **16** of talc that isn't paying you?
 09:42:28 **17** MS. O'DELL: Object to the form.
 09:42:29 **18** THE WITNESS: Not that I know of. You
 09:42:31 **19** would have to ask Dr. Longo about that.
 09:42:33 **20** Q. (By Mr. Chachkes) Is all the talc testing
 09:42:36 **21** that you've been involved with been done at the
 09:42:38 **22** request of plaintiffs' lawyers who pay you?
 09:42:40 **23** A. I have no idea who all of the folks are
 09:42:43 **24** that have asked us to test talc. You would, again,
 09:42:46 **25** have to ask Dr. Longo.
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09:42:47 **1** Q. You just don't know where the money comes
 09:42:49 **2** from for your work?
 09:42:50 **3** MS. O'DELL: Object to the form.
 09:42:51 **4** THE WITNESS: No.
 09:42:51 **5** Q. (By Mr. Chachkes) Have you ever testified
 09:42:54 **6** in a federal court about testing talc? A federal
 09:42:57 **7** court.
 09:42:57 **8** A. I don't think so.
 09:42:59 **9** Q. Has any federal court ever said your work
 09:43:01 **10** or your methodology has passed Daubert or standards
 09:43:04 **11** for scientific rigor?
 09:43:06 **12** A. I want to say yes to that.
 09:43:08 **13** Q. And why do you want to say yes to that?
 09:43:09 **14** A. Because I believe they have, but I would
 09:43:11 **15** have to check the record.
 09:43:12 **16** Q. What about has any federal court ever said
 09:43:14 **17** your methodology or your work regarding to talc
 09:43:19 **18** analysis has passed Daubert standards for scientific
 09:43:22 **19** rigor?
 09:43:23 **20** MS. O'DELL: Object to the form.
 09:43:24 **21** THE WITNESS: That I don't believe has
 09:43:25 **22** been done.
 09:43:27 **23** Q. (By Mr. Chachkes) How many publications
 09:43:29 **24** do you have in the peer-reviewed literature?
 09:43:31 **25** A. I hadn't counted them. They're on my CV.
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09:43:34 **1** You can count them.
 09:43:35 **2** Q. How many were not funded by MAS?
 09:43:42 **3** MS. O'DELL: Object to the form.
 09:43:43 **4** Q. (By Mr. Chachkes) If any?
 09:43:44 **5** A. Not funded by MAS?
 09:43:46 **6** Q. Yeah.
 09:43:47 **7** A. None of them were funded by MAS.
 09:43:49 **8** Q. Who were they funded by?
 09:43:51 **9** A. Again, most all of them were done as pure
 09:43:56 **10** research and the -- well, I guess if you're looking
 09:44:02 **11** at it as funded by, I don't know what you mean by
 09:44:04 **12** funded by MAS. But we essentially -- when you do a
 09:44:09 **13** research study, it's typically not funded by anybody.
 09:44:12 **14** Q. So this is -- were all your peer-reviewed
 09:44:17 **15** publications done based on work done at MAS?
 09:44:21 **16** A. Yes. Well, not all of them. I mean,
 09:44:25 **17** there were a lot of them I did at graduate school,
 09:44:27 **18** yes.
 09:44:27 **19** Q. So other than your graduate school
 09:44:29 **20** peer-reviewed publications where your -- are your
 09:44:33 **21** peer-reviewed publications from your work at MAS?
 09:44:35 **22** A. All of them? At this point I'd have to go
 09:44:41 **23** and look.
24 Q. Okay.
 09:44:41 **25** A. I can't recall.
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09:44:42 **1** Q. For those peer-reviewed works that you
 09:44:45 **2** published based on work done at MAS, the underlying
 09:44:49 **3** work at MAS was funded by someone; correct?
 09:44:53 **4** MS. O'DELL: Object to the form.
 09:44:54 **5** THE WITNESS: No, not necessarily. No.
 09:44:56 **6** We did work that wasn't funded by others that
 09:45:00 **7** were published.
 09:45:01 **8** Q. (By Mr. Chachkes) So you've done work at
 09:45:03 **9** MAS that was purely academic, not really funded by
 09:45:07 **10** anybody or for any purpose other than academics?
 09:45:09 **11** MS. O'DELL: Object to the form.
 09:45:10 **12** THE WITNESS: To my knowledge, yes.
 09:45:11 **13** Q. (By Mr. Chachkes) And how many of your
 09:45:13 **14** publications could qualify as that?
 09:45:15 **15** A. Again, I don't know, I would have to go
 09:45:19 **16** and look.
 09:45:19 **17** Q. Would you agree it's important to disclose
 09:45:23 **18** sources of funding for publications in peer-reviewed
 09:45:27 **19** literature?
 09:45:27 **20** A. Sure.
 09:45:27 **21** Q. Are there any publications you have that
 09:45:31 **22** were funded by plaintiffs' lawyer monies?
 09:45:34 **23** MS. O'DELL: Object to the form.
 09:45:36 **24** THE WITNESS: Again, I would have to go --
 09:45:37 **25** I would have to look.
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09:45:38 **1** Q. (By Mr. Chachkes) Okay.

09:45:39 **2** A. Off the top of my head, I don't recall.

09:45:41 **3** Q. But if it were, it would be important to

09:45:43 **4** disclose that fact?

09:45:44 **5** A. And it would be disclosed because the

09:45:46 **6** publications, the editorial process requires that.

09:45:49 **7** Q. And there's no publications in the

09:45:53 **8** peer-reviewed literature regarding testing for

09:45:57 **9** talc -- testing talc; right?

09:46:00 **10** MS. O'DELL: Object to the form. Object

09:46:01 **11** to the form.

09:46:02 **12** THE WITNESS: Your question again, I'm

09:46:03 **13** sorry?

09:46:03 **14** Q. (By Mr. Chachkes) You don't have any

09:46:04 **15** peer-reviewed publications regarding the testing of

09:46:06 **16** talc; right?

09:46:07 **17** A. I don't, no.

09:46:07 **18** Q. What about peer-reviewed publications

09:46:12 **19** regarding the testing of talc in ovarian tissue?

09:46:14 **20** MS. O'DELL: Object to the form. Are you

09:46:15 **21** talking about his publications or in --

09:46:18 **22** MR. CHACHKES: Of course, yes.

09:46:20 **23** MS. O'DELL: It's not clear on the

24 question.

25 THE WITNESS: Yeah.

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09:47:30 **1** idea. I don't keep track of it.

09:47:32 **2** Q. Over 50 percent?

09:47:34 **3** A. Again, I don't know.

09:47:35 **4** Q. It could be over 50 percent, but you don't

09:47:38 **5** know?

09:47:38 **6** MS. O'DELL: Object to the form.

09:47:39 **7** THE WITNESS: I do not know. It could be

09:47:40 **8** as little as 10 percent. It could be 5 percent.

09:47:43 **9** I don't know.

09:47:44 **10** Q. (By Mr. Chachkes) Could it be 50 percent?

09:47:46 **11** A. No, I don't think so.

09:47:47 **12** Q. 2018, what percentage of your time did you

09:47:50 **13** spend working on talc-related litigation projects?

09:47:53 **14** A. Same answer.

09:47:54 **15** Q. What's the majority of your time spent on

09:47:58 **16** at MAS?

09:47:58 **17** A. At the laboratory?

09:47:59 **18** Q. Just at MAS generally.

09:48:01 **19** A. Oh, a variety of different things on a

09:48:03 **20** daily basis.

09:48:04 **21** Q. If you had to pick one thing that you

09:48:07 **22** spend most of your time on, what's that?

09:48:09 **23** A. Most of my time -- I would say most of my

09:48:18 **24** time is spent on technological issues surrounding

09:48:23 **25** analyses that we do.

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09:46:20 **1** MS. O'DELL: So would you ask the question

09:46:21 **2** again, please.

09:46:21 **3** Q. (By Mr. Chachkes) Do you have any

09:46:23 **4** publications in the peer-reviewed literature about

09:46:23 **5** testing ovarian tissue for talc?

09:46:26 **6** A. No.

09:46:27 **7** Q. Do you have any publications in the

09:46:30 **8** peer-reviewed literature about testing ovarian tissue

09:46:35 **9** for asbestos?

09:46:35 **10** A. No.

09:46:38 **11** Q. Do you have any publications -- actually,

09:46:45 **12** skip that.

09:46:49 **13** Have you been a coauthor on all of

09:46:51 **14** Dr. Longo's reports testing Johnson & Johnson talcum

09:46:58 **15** powder products?

09:46:58 **16** A. The answer to that is I don't know. A

09:47:04 **17** number of them, yes.

09:47:05 **18** Q. Okay. Are you aware of any report by

09:47:08 **19** Dr. Longo where he issued an expert report in

09:47:11 **20** litigation about testing Johnson Baby Powder and

09:47:15 **21** didn't have you as a coauthor?

09:47:17 **22** A. I don't recall as I sit here.

09:47:19 **23** Q. 2017, what percentage of your time did you

09:47:24 **24** spend working on talc-related litigation projects?

09:47:27 **25** A. I always get that question. I have no

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09:48:24 **1** Q. Of what?

09:48:25 **2** A. Of all kinds of materials.

09:48:27 **3** Q. What material do you spend most of your

09:48:30 **4** time on?

09:48:31 **5** MS. O'DELL: Object to the form.

09:48:32 **6** THE WITNESS: What material did I spend

09:48:33 **7** most of my time on?

09:48:34 **8** Q. (By Mr. Chachkes) Correct.

09:48:35 **9** A. That would vary by the week.

09:48:36 **10** Q. Okay.

09:48:37 **11** A. Yeah.

09:48:37 **12** Q. There are weeks where it's asbestos;

13 right?

09:48:40 **14** A. There can be some that are, yes.

09:48:42 **15** Q. Okay. What's another material that you

09:48:44 **16** might have spent a majority of your time on that's

09:48:48 **17** not asbestos?

09:48:49 **18** MS. O'DELL: Object to the form.

09:48:50 **19** THE WITNESS: Tissue.

09:48:50 **20** Q. (By Mr. Chachkes) Tissue for looking at

09:48:51 **21** whether it contains asbestos?

09:48:52 **22** A. In some cases, yes.

09:48:53 **23** Q. Okay. What are -- I mean, is there a

09:48:57 **24** solid chunk of time, like really a significant chunk

09:49:01 **25** of your time, let's say, over 5 percent of a year

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09:49:04 **1** where you're spending doing some scientific work that
 09:49:06 **2** has nothing to do with talc or asbestos?
 09:49:09 **3** **A.** Yes.
 09:49:09 **4** **Q.** Okay. What would that be?
 09:49:11 **5** **A.** Well, once again, technological issues
 09:49:17 **6** surrounding things at our laboratory. For instance,
 09:49:19 **7** as a chief science officer I get all kinds of
 09:49:22 **8** questions about what we're looking at as far as
 09:49:27 **9** instrumentation in our laboratory in order to do
 09:49:30 **10** certain kinds of analyses.
 09:49:34 **11** We have clients -- potential clients that
 09:49:38 **12** call in and they want to do an analysis on maybe a
 09:49:42 **13** drug of some kind, something like that.
 09:49:44 **14** So it would be up to me working with
 09:49:47 **15** another scientists there at the laboratory to
 09:49:50 **16** understand what resources we need to be able to do
 09:49:52 **17** that kind of test, whether we will do that kind of
 09:49:55 **18** test.
 09:49:55 **19** **Q.** Do you bill for your time working for
 09:50:01 **20** plaintiffs in talc cases?
 09:50:03 **21** **A.** Yes.
 09:50:03 **22** **Q.** Do you write down the hours?
 09:50:05 **23** **A.** I do keep some of the hours, yes.
 09:50:08 **24** **Q.** Okay. You say some? There's some times
 09:50:12 **25** you work for plaintiffs' lawyers and you don't charge
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09:50:14 **1** them?
 09:50:15 **2** **MS. O'DELL:** Object to the form.
 09:50:16 **3** **THE WITNESS:** Uh-huh. Yes.
 09:50:17 **4** **Q.** (By Mr. Chachkes) Why?
 09:50:18 **5** **A.** Because it just happens.
 09:50:19 **6** **Q.** But for the most part you bill for your
 09:50:21 **7** time?
 09:50:21 **8** **A.** Yes.
 09:50:21 **9** **Q.** And --
 09:50:23 **10** **A.** I don't bill for it. MAS bills for it.
 09:50:25 **11** Yes.
 09:50:26 **12** **Q.** Can you estimate how much time you spent
 09:50:29 **13** working on the MDL projects?
 09:50:30 **14** **A.** No. I think we already talked about that
 09:50:34 **15** earlier.
 09:50:35 **16** **Q.** Okay.
 09:50:35 **17** **A.** Yep.
 09:50:36 **18** **Q.** Do you have any estimate as to what
 09:50:44 **19** percentage of your time recently has been for
 09:50:46 **20** litigation-related projects as opposed to
 09:50:49 **21** nonlitigation-related projects?
 09:50:51 **22** **A.** No.
 09:50:51 **23** **Q.** Could it be 50 percent?
 09:50:53 **24** **MS. O'DELL:** Objection.
 09:50:54 **25** **THE WITNESS:** I have no idea.
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09:50:55 **1** **Q.** (By Mr. Chachkes) Okay. You testified in
 09:51:00 **2** your first talc case in the Ingham matter in Missouri
 09:51:03 **3** last year?
 09:51:04 **4** **A.** Yes.
 09:51:05 **5** **Q.** You testified regarding your tissue
 09:51:07 **6** analysis?
 09:51:07 **7** **A.** Yes.
 09:51:08 **8** **Q.** And you testified at trial about
 09:51:09 **9** extrapolating asbestos content from TEM testing;
 09:51:14 **10** correct?
 09:51:14 **11** **A.** Yes.
 09:51:14 **12** **Q.** Do you know how much money MAS has made in
 09:51:19 **13** asbestos litigation over the years?
 09:51:20 **14** **A.** I have no idea.
 09:51:21 **15** **Q.** Do you know how much money MAS has made
 09:51:24 **16** over -- for talc litigation over the years?
 09:51:26 **17** **A.** No.
 09:51:26 **18** **Q.** You have no involvement in that aspect
 09:51:29 **19** of --
 09:51:29 **20** **A.** I wouldn't know.
 09:51:33 **21** **Q.** To your knowledge, did MAS ever test
 09:51:37 **22** cosmetic talcum powder for asbestos before being
 09:51:40 **23** engaged by plaintiffs' lawyers for that kind of work?
 09:51:43 **24** **MS. O'DELL:** Object to the form.
 09:51:44 **25** **THE WITNESS:** The answer to that question
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09:51:45 **1** is probably.
 09:51:47 **2** **Q.** (By Mr. Chachkes) Why do you say
 09:51:48 **3** probably?
 09:51:48 **4** **A.** Because of the work that has been done
 09:51:54 **5** over the years. We did quite a bit of testing in the
 09:51:58 **6** past, I believe, on talc that was used in industrial
 09:52:09 **7** applications; but also the suppliers use the same
 09:52:13 **8** kind of talc in, for instance, cosmetics and drug
 09:52:19 **9** applications.
 09:52:19 **10** **Q.** So it's your testimony that talc
 09:52:22 **11** manufacturers use the same exact talc for industrial
 09:52:26 **12** purposes and cosmetic purposes?
 09:52:27 **13** **A.** No, that's not my testimony.
 09:52:29 **14** **MS. O'DELL:** Object to form.
 09:52:30 **15** **Q.** (By Mr. Chachkes) Did MAS ever -- I'm
 09:52:30 **16** going to focus on the word cosmetic here.
 09:52:32 **17** **A.** Okay.
 09:52:33 **18** **Q.** Did MAS ever test cosmetic talcum powder
 09:52:37 **19** for asbestos prior to being engaged to do that work
 09:52:38 **20** for plaintiffs' lawyers?
 09:52:39 **21** **MS. O'DELL:** Object to the form.
 09:52:40 **22** **THE WITNESS:** The answer to that again, as
 09:52:43 **23** I said before, is probably.
 09:52:45 **24** **Q.** (By Mr. Chachkes) Okay. So was it J&J
 09:52:49 **25** cosmetic talcum powder? Colgate cosmetic talcum
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09:52:53 **1** powder? What cosmetic talcum powder do you think
 09:52:58 **2** that was?
 09:52:58 **3** **A.** I don't know. I do know, again, that a
 09:53:00 **4** number of different types of talcum powders were
 09:53:03 **5** tested at MAS prior to this litigation.
 09:53:04 **6** **Q.** Well, you cited some industrial talcum
 09:53:14 **7** powder --
 09:53:14 **8** **A.** Yes. Well, I just used a --
 09:53:14 **9** THE REPORTER: Wait. One at a time.
 09:53:14 **10** THE WITNESS: Sorry. Ask the question
 09:53:16 **11** again.
 09:53:16 **12** **Q.** (By Mr. Chachkes) Okay. You have no
 09:53:18 **13** specific memory of testing any cosmetic talcum powder
 09:53:22 **14** prior to being engaged by plaintiff lawyers to do
 09:53:27 **15** this?
 09:53:27 **16** MS. O'DELL: Object to the form.
 09:53:28 **17** THE WITNESS: Again, now you've asked the
 09:53:32 **18** question differently than before. The answer
 09:53:36 **19** again is, as I said, MAS has been involved in
 09:53:40 **20** testing talcum powders in the past prior to this
 09:53:44 **21** litigation, and some of them most probably were
 09:53:49 **22** cosmetic types, too.
 09:53:50 **23** **Q.** (By Mr. Chachkes) When you say most
 09:53:52 **24** probably, did you have a personal involvement in
 09:53:53 **25** those testings?
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09:55:12 **1** in the world to analyze talc for asbestos?
 09:55:15 **2** MS. O'DELL: Object to the form.
 09:55:16 **3** THE WITNESS: I like the way you put that.
 09:55:19 **4** Do like that.
 09:55:22 **5** I would say that, yes, we're one of the
 09:55:26 **6** best in the world, yes.
 09:55:26 **7** **Q.** (By Mr. Chachkes) Can you name some
 09:55:28 **8** others that are in your league?
 09:55:30 **9** MS. O'DELL: Object to the form.
 09:55:31 **10** THE WITNESS: Well, that again calls for a
 09:55:35 **11** judgment on these other laboratories. So, you
 09:55:42 **12** know, I respect the other laboratories that are
 09:55:44 **13** doing this work. But as far as best in the
 09:55:48 **14** world, I would put MAS right there.
 09:55:50 **15** **Q.** (By Mr. Chachkes) Okay. The question was
 09:55:51 **16** what other laboratories are up there?
 09:55:53 **17** **A.** I think Jim Millette's lab was -- is
 09:56:00 **18** definitely up there.
 09:56:02 **19** **Q.** What about McCrone?
 09:56:03 **20** **A.** Yes.
 09:56:04 **21** **Q.** Are there academic laboratories that can
 09:56:09 **22** analyze for asbestos in talc at the level you do?
 09:56:13 **23** **A.** Academic laboratories?
 09:56:14 **24** **Q.** Yes.
 09:56:15 **25** **A.** With the quality control we have? I can't
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09:53:54 **1** **A.** Being at the laboratory and seeing samples
 09:54:01 **2** that have come in and had come in over that period of
 09:54:05 **3** time, again, the answer to that is probably.
 09:54:09 **4** **Q.** Okay. So but what about personally
 09:54:11 **5** involved in the experimentation on talc prior to
 09:54:14 **6** being engaged by plaintiff lawyers, were you
 09:54:17 **7** personally involved in any such investigations?
 09:54:20 **8** **A.** The answer to that is probably also.
 09:54:22 **9** **Q.** Okay. So you've run TEM on talcum powder
 09:54:26 **10** at MAS prior to being engaged by --
 09:54:29 **11** **A.** Well, when you say --
 09:54:31 **12** MS. O'DELL: Object to the form.
 09:54:33 **13** THE WITNESS: -- personally involved,
 09:54:36 **14** again, part of the work that I have done in the
 09:54:39 **15** past as a laboratory manager would be to be at
 09:54:41 **16** the location where the analyst is analyzing that
 09:54:45 **17** talc or that product and looking over their
 09:54:48 **18** shoulder and seeing what they're doing. So that
 09:54:50 **19** would be the personal involvement right there.
 09:54:58 **20** **Q.** (By Mr. Chachkes) Okay. Can you name any
 09:55:00 **21** cosmetic talcum powder that MAS looked at prior to
 09:55:03 **22** being engaged at -- engaged by plaintiff lawyers to
 09:55:06 **23** do that, to look at cosmetic talcum powder?
 09:55:08 **24** **A.** I can't recall that as I sit here.
 09:55:08 **25** **Q.** Okay. Do you believe MAS is the best lab
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09:56:20 **1** think of any.
 09:56:21 **2** **Q.** Okay. You do better analysis of
 09:56:23 **3** asbestos -- of talc for asbestos than academic
 09:56:26 **4** laboratories that focus on mineralogy exclusively?
 09:56:29 **5** MS. O'DELL: Object to the form.
 09:56:30 **6** THE WITNESS: When it comes to quality
 09:56:32 **7** control, yes.
 09:56:32 **8** **Q.** (By Mr. Chachkes) What about in terms of
 09:56:35 **9** accurate results?
 09:56:36 **10** **A.** Same. Same answer.
 09:56:37 **11** **Q.** Are MAS's analyses of talc for asbestos
 09:56:44 **12** reproducible by other labs?
 09:56:48 **13** MS. O'DELL: Object to the form.
 09:56:49 **14** THE WITNESS: Again, I don't know how to
 09:56:50 **15** answer that. But they should be if they use the
 09:56:54 **16** same technologies and techniques.
 09:56:57 **17** **Q.** (By Mr. Chachkes) Even though their
 09:56:58 **18** quality controls aren't up to your standards?
 09:57:01 **19** MS. O'DELL: Object to the form.
 09:57:02 **20** THE WITNESS: Oh, well, in that case the
 09:57:03 **21** answer is I couldn't tell you.
 09:57:04 **22** **Q.** (By Mr. Chachkes) Okay. So there's no
 09:57:05 **23** lab you can cite right now -- academic, professional,
 09:57:09 **24** industrial, or otherwise -- that can reproduce your
 09:57:13 **25** results with the same accuracy?
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09:57:14 **1** MS. O'DELL: Object to the form. That's
 09:57:15 **2** not his question.
 09:57:17 **3** Q. (By Mr. Chachkes) It's a question.
 09:57:18 **4** A. Ask it a different way.
 09:57:20 **5** Q. No.
 09:57:21 **6** Can you reread the question, please.
 09:57:31 **7** (The record was read by the reporter.)
 09:57:32 **8** MS. O'DELL: Object to the form.
 09:57:33 **9** THE WITNESS: Well, if they -- again, if
 09:57:34 **10** they use the same techniques, they should be
 09:57:38 **11** able to, sure.
 09:57:39 **12** Q. (By Mr. Chachkes) Okay. So anyone
 09:57:46 **13** following the ISO 22262 protocol should be able to
 09:57:50 **14** reproduce your results?
 09:57:51 **15** MS. O'DELL: Object to the form.
 09:57:53 **16** THE WITNESS: If they're following the
 09:57:54 **17** protocol, it's most likely that they could, yes.
 09:57:56 **18** Q. (By Mr. Chachkes) Okay. Has MAS received
 09:58:01 **19** any accolades from any academic institutions for its
 09:58:07 **20** testing of talc?
 09:58:07 **21** A. Academic institutions?
 09:58:09 **22** Q. Yes.
 09:58:09 **23** A. I have no idea.
 09:58:11 **24** Q. Has any renowned -- nationally or
 09:58:15 **25** internationally renowned TEM scientist identified MAS
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09:59:11 **1** Q. (By Mr. Chachkes) All right. So let me
 09:59:11 **2** ask the same question again.
 09:59:11 **3** Are there any nationally or
 09:59:13 **4** internationally renowned TEM scientists that have
 09:59:14 **5** identified MAS as one of the best labs in the world
 09:59:17 **6** for testing talc?
 09:59:18 **7** MS. O'DELL: Object to the form.
 09:59:19 **8** THE WITNESS: Well, let me answer it.
 09:59:20 **9** There haven't been any that haven't said we're
 09:59:23 **10** not the best either, okay?
 09:59:25 **11** Q. (By Mr. Chachkes) Have any nationally or
 09:59:28 **12** internationally renowned PLM scientists identified
 09:59:31 **13** MAS as one of the best labs -- strike that.
 09:59:35 **14** Have you ever presented at any conferences
 09:59:37 **15** about testing talc with TEM?
 09:59:40 **16** A. No.
 09:59:40 **17** Q. Have you ever presented any conferences
 09:59:42 **18** about testing talc with PLM?
 09:59:44 **19** A. No.
 09:59:44 **20** Q. Have you ever presented -- have you ever
 09:59:50 **21** been invited to any conferences on the subject matter
 09:59:53 **22** of testing talc?
 09:59:55 **23** A. I can't recall any invitations.
 09:59:57 **24** Q. When did you personally first learn about
 10:00:01 **25** the ISO 22262-2 TEM method?
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09:58:19 **1** as one of the best labs in the world for testing
 09:58:22 **2** talc?
 09:58:23 **3** MS. O'DELL: Object to the form.
 09:58:24 **4** THE WITNESS: Well, I think if you want to
 09:58:25 **5** talk about good laboratories in that kind of
 09:58:27 **6** testing, you would definitely look to NIST NVLAP
 09:58:33 **7** as the national standard for TEM laboratories
 09:58:36 **8** and testing. So, you know, they would -- you
 09:58:44 **9** know, based on their assessments, their audits
 09:58:47 **10** of our laboratory, then I would say yes.
 09:58:49 **11** Q. (By Mr. Chachkes) Okay. So NIST and
 09:58:51 **12** NVLAP have told MAS that you're one of the best labs
 09:58:55 **13** in the world for testing talc?
 09:58:57 **14** MS. O'DELL: Object to the form.
 09:58:58 **15** THE WITNESS: No, they don't say things
 09:58:59 **16** like that.
 09:58:59 **17** Q. (By Mr. Chachkes) Okay. They just
 09:59:00 **18** accredit you?
 09:59:00 **19** A. Yeah, of course. Yeah.
 09:59:02 **20** Q. They didn't give you some super
 09:59:04 **21** accreditation that only you get or you're above and
 09:59:07 **22** beyond other laboratories; correct?
 09:59:08 **23** A. No --
 09:59:08 **24** MS. O'DELL: Object to the form.
 09:59:10 **25** THE WITNESS: -- there's no such thing.
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10:00:05 **1** A. Oh, I don't know, a couple of years ago.
 10:00:08 **2** Q. From whom did you learn it?
 10:00:09 **3** A. I can't recall.
 10:00:14 **4** Q. When was the first time that anyone at MAS
 10:00:21 **5** tested a talc sample using the ISO 22262 method?
 10:00:25 **6** A. It probably was a couple of years ago, I
 10:00:28 **7** would think.
 10:00:29 **8** Q. Sometime in 2017?
 10:00:30 **9** MS. O'DELL: Object to form.
 10:00:31 **10** THE WITNESS: Again, I don't know an exact
 10:00:32 **11** date for that.
 10:00:33 **12** Q. (By Mr. Chachkes) Could it have been in
 10:00:34 **13** 2016?
 10:00:34 **14** A. I don't know. We have been using it for
 10:00:36 **15** quite a while. So as far as the exact date, I don't
 10:00:40 **16** know.
 10:00:40 **17** Q. Could it have be in 2015?
 10:00:42 **18** MS. O'DELL: Object to the form.
 10:00:43 **19** THE WITNESS: I don't know.
 10:00:44 **20** Q. (By Mr. Chachkes) You're the lab manager;
 10:00:46 **21** right? You were --
 10:00:46 **22** A. I was for a time, yes.
 10:00:47 **23** Q. Okay. Would you be aware of any ISO 22262
 10:00:52 **24** test of talc in your laboratory?
 10:00:56 **25** A. Yes.
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10:00:56 **1 Q.** Could the first test have been in 2018?

10:01:00 **2 A.** Again, I don't know. It's been at least,

10:01:04 **3** I don't know, two or three years at least.

10:01:06 **4 Q.** Okay. Did your analyst use ISO 22262 on

10:01:13 **5** any talc samples prior to the testing reported on in

10:01:16 **6** this report?

10:01:17 **7** MS. O'DELL: Object to the form.

10:01:18 **8** THE WITNESS: I don't know.

10:01:19 **9 Q.** (By Mr. Chachkes) Your report includes

10:01:27 **10** EDXA spectra for several particles; correct?

10:01:29 **11 A.** The reports do, yes.

10:01:30 **12 Q.** Yeah. What is EDXA?

10:01:35 **13 A.** Energy dispersive spectroscopy -- x-ray

10:01:38 **14** energy dispersive spectroscopy.

10:01:38 **15 Q.** Can you identify a particle of asbestos

10:01:39 **16** using EDXA alone?

10:01:42 **17 A.** You mean a fiber, that type of thing, a

10:01:45 **18** bundle, fiber bundle? You're just saying particle,

19 so --

20 Q. Okay.

10:01:50 **21 A.** Yeah, I'm just trying to be specific.

10:01:52 **22 Q.** So was the answer different to my question

10:01:54 **23** whether I used the word particle or a fiber or

10:01:56 **24** bundle?

10:01:57 **25 A.** No.

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10:03:04 **1** they will set the microscope up for the EDX process,

10:03:10 **2** and that involves setting some lenses and condensers

10:03:14 **3** in there so that you can focus the beam on the

10:03:17 **4** particle.

10:03:17 **5** Then the beam is focused. The

10:03:20 **6** spectrometer is put into place in the microscope.

10:03:24 **7** Then you, of course, begin the process of collecting

10:03:29 **8** x-rays from the specimen.

10:03:31 **9 Q.** And then you get an EDXA spectrum?

10:03:35 **10 A.** Yes.

10:03:36 **11 Q.** Let's look at an example spectrum so you

10:03:39 **12** could tell me about it. There's probably one that's

10:03:42 **13** already been marked.

10:03:52 **14** I'm going to present to you with what was

10:03:54 **15** marked yesterday as Longo Number 12. Do you see

10:03:57 **16** that?

10:03:57 **17 A.** Yes.

10:03:58 **18 Q.** And that's an EDXA spectra from your

10:04:03 **19** expert report; correct?

10:04:05 **20** MS. O'DELL: Object to the form.

10:04:07 **21** THE WITNESS: If it's from our report,

10:04:09 **22** yes.

10:04:09 **23 Q.** (By Mr. Chachkes) Okay. It is from your

10:04:11 **24** report. So is that what an EDXA spectra looks like?

10:04:20 **25 A.** Yes.

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10:02:00 **1 Q.** Okay. So let me ask again.

2 A. Okay.

10:02:02 **3 Q.** Can you identify a particle of asbestos by

10:02:04 **4** EDXA alone?

10:02:06 **5 A.** Yes. Well, no, not by just EDXA, no.

10:02:10 **6 Q.** Okay. Why not?

10:02:11 **7 A.** Well, they have the chemistry, and they

10:02:14 **8** would be similar to the chemistry of another type of

10:02:17 **9** fiber too.

10:02:18 **10 Q.** Can you distinguish anthophyllite from

10:02:21 **11** talc using EDXA alone?

10:02:24 **12 A.** No. You need other methodologies, and

10:02:29 **13** that's what we use. We use a suite of methodologies.

10:02:32 **14 Q.** Can you distinguish anthophyllite from

10:02:39 **15** cummingtonite with EDXA alone?

10:02:41 **16 A.** The answer to that is no.

10:02:43 **17 Q.** So for the EDXA process, walk me through

10:02:50 **18** the steps. What do you do?

10:02:52 **19 A.** Where do you want to start on that?

10:02:55 **20 Q.** Well, you've got a particle?

10:02:56 **21 A.** Okay.

10:02:57 **22 Q.** You've decided I want to do EDXA on that?

10:03:01 **23 A.** Right.

10:03:01 **24 Q.** What do you do next?

10:03:02 **25 A.** Well, essentially what the analyst does is

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10:04:21 **1 Q.** And you'll notice on the bottom left-hand

10:04:26 **2** corner it says elements and it has got some elements

10:04:28 **3** and it says total?

10:04:29 **4 A.** Yes.

10:04:29 **5 Q.** Your software can generate information

10:04:31 **6** that fills in that; correct?

10:04:32 **7 A.** Yes.

10:04:33 **8 Q.** Why don't you turn that -- why don't you

10:04:35 **9** use it, that software?

10:04:36 **10 A.** We do.

10:04:38 **11 Q.** Okay. Why in these experiments did you

10:04:41 **12** not put in the information that can be generated on

10:04:45 **13** the bottom left-hand side of Exhibit 12?

10:04:48 **14** MS. O'DELL: Object to the form.

10:04:49 **15** THE WITNESS: Well, there could be any

10:04:50 **16** number of reasons for that. Typically, when

10:04:54 **17** we're looking at these types of particles, they

10:04:58 **18** have characteristic spectra for the -- if it's a

10:05:02 **19** particular asbestos type.

10:05:03 **20** For instance, this is tremolite. You can

10:05:07 **21** turn the -- the data's there, so you can turn

10:05:12 **22** that data on to show you what the oxides are for

10:05:15 **23** the oxides.

10:05:16 **24 Q.** (By Mr. Chachkes) Is it a coincidence

10:05:19 **25** that the data was not turned on for any of these, or

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10:05:22 **1** were the analysts actually instructed not to turn it
 10:05:25 **2** on?
 10:05:25 **3** **A.** No, it's not a coincidence.
 10:05:27 **4** **Q.** Okay. They were instructed to not
 10:05:28 **5** generate that data?
 10:05:29 **6** **A.** No. No, no, no. No.
 10:05:31 **7** **Q.** Now, is it standard operating practice not
 10:05:36 **8** to generate that data?
 10:05:37 **9** **A.** Is it standard operating practice --
 10:05:39 **10** **Q.** -- at MAS not to generate that data?
 10:05:41 **11** **A.** They don't have to generate it. It's not
 10:05:43 **12** required.
13 **Q.** Okay.
 10:05:43 **14** **A.** It's not required by the method.
 10:05:45 **15** **Q.** Is that data in the software, you just
 10:05:51 **16** choose not to print it out?
 10:05:53 **17** MS. O'DELL: Object to the form.
 10:05:54 **18** THE WITNESS: I would have to check on
 10:05:55 **19** that to see. So that's my answer to that right
 10:05:59 **20** now.
 10:05:59 **21** **Q.** (By Mr. Chachkes) Okay.
 10:06:00 **22** **A.** Yeah.
 10:06:00 **23** **Q.** And is that data -- you wouldn't
 10:06:04 **24** deliberately delete that data; right?
 10:06:06 **25** **A.** No, never.
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10:07:08 **1** Maybe just flip it up to the last page.
2 **A.** Okay.
 10:07:10 **3** **Q.** You see there, it's an EDXA printout.
 10:07:15 **4** This is not yours.
5 **A.** Sure.
 10:07:15 **6** **Q.** This is from Connecticut.
 10:07:17 **7** **A.** Uh-huh.
 10:07:17 **8** **Q.** And you see that -- it looks like it was
 10:07:18 **9** generated from the same software as yours, it's the
 10:07:21 **10** same fonts, same format. Is that a reasonable
 10:07:24 **11** conclusion?
 10:07:25 **12** **A.** I don't know --
 10:07:26 **13** MS. O'DELL: Object to the form.
 10:07:27 **14** THE WITNESS: -- we'd have to see. You
 10:07:29 **15** know, they're all -- there are a number of
 10:07:31 **16** different EDS software packages out there.
 10:07:34 **17** **Q.** (By Mr. Chachkes) Do you know the name of
 10:07:36 **18** your EDS software package?
 10:07:38 **19** **A.** I want to say it's called Revolutions.
 10:07:40 **20** **Q.** Are there different versions of the
 10:07:42 **21** Revolution software?
 10:07:43 **22** **A.** I don't know.
 10:07:44 **23** **Q.** And the information in the lower left, you
 10:07:48 **24** see that's generated for each of the relevant
 10:07:52 **25** elements, weight percentage, standard deviation,
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 10:06:07 **1** **Q.** Is that data still at MAS, that if I asked
 10:06:10 **2** you to redo these with the data printed out, could
 10:06:12 **3** you do it?
 10:06:13 **4** **A.** I don't know. We would have to ask Bill
 10:06:16 **5** to see if it, in fact, is. It depends on the
 10:06:21 **6** software.
 10:06:23 **7** **Q.** Okay.
 10:06:23 **8** **A.** Yeah.
 10:06:24 **9** MR. CHACHKES: We would request that data
 10:06:25 **10** be produced. So if -- we'll make a formal
 10:06:30 **11** request for that.
 10:06:30 **12** MS. O'DELL: I think the data that's
 10:06:32 **13** available has been produced, it's provided in
 10:06:34 **14** the report, and so there's no further data.
 10:06:36 **15** **Q.** (By Mr. Chachkes) We'll --
 10:06:37 **16** **A.** Well, this is adequate to tell if this is
 10:06:39 **17** a characteristic spectrum of tremolite, but you can't
 10:06:44 **18** say, well, we know this is tremolite. We have other
 10:06:46 **19** methods that have to be coupled together to be able
 10:06:48 **20** to, you know, 99.9 percent say it is.
 10:06:52 **21** **Q.** I'm just talking about the data down
 10:06:53 **22** there.
 10:06:54 **23** **A.** Okay.
 10:06:54 **24** **Q.** Let's look at what was marked yesterday as
 10:06:56 **25** Exhibit 13. If you could look at like the last page.
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 10:07:55 **1** atomic percentage, oxide percentage, other
 10:07:56 **2** information; do you see that?
 10:07:57 **3** **A.** Yes.
 10:07:58 **4** **Q.** Can you generate all that information if
 10:08:00 **5** you wanted to for your EDXA?
 10:08:04 **6** MS. O'DELL: Object to the form.
 10:08:06 **7** THE WITNESS: Again, it depends on the way
 10:08:07 **8** the software operates, if it's set up to be able
 10:08:11 **9** to collect that information and make those
 10:08:12 **10** statistics.
 10:08:12 **11** **Q.** (By Mr. Chachkes) For the EDXA
 10:08:15 **12** experiments that you ran for the purposes of the MDL
 10:08:18 **13** report, would you be able to generate that
 10:08:21 **14** information or you just don't know?
 10:08:23 **15** MS. O'DELL: Object to form.
 10:08:24 **16** THE WITNESS: I don't know.
 10:08:24 **17** **Q.** (By Mr. Chachkes) Okay. Do you
 10:08:27 **18** understand that that information, some people find
 10:08:30 **19** that useful?
 10:08:31 **20** MS. O'DELL: Objection.
 10:08:31 **21** THE WITNESS: It can be, yeah.
 10:08:33 **22** **Q.** (By Mr. Chachkes) Why?
 10:08:33 **23** **A.** Well, it can be useful in -- for instance,
 10:08:37 **24** if you're a research geologist and you're trying to
 10:08:41 **25** determine the composition and the makeup of an
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10:08:43 **1** unknown, that would be very helpful.

10:08:44 **2 Q.** Okay. Why is it very helpful?

10:08:46 **3 A.** Again, if they are -- if they're trying to

10:08:49 **4** understand the composition of these materials, then

10:08:52 **5** that information is part of info to try to figure out

10:09:00 **6** what you're working with.

10:09:01 **7 Q.** That information that we're talking about

10:09:05 **8** a researcher can use to estimate the composition, the

10:09:11 **9** chemical composition, of the subject particle; right?

10:09:14 **10** MS. O'DELL: Object to form.

10:09:14 **11** THE WITNESS: Yeah, they can estimate it.

10:09:15 **12** They can estimate it.

10:09:16 **13** MS. O'DELL: Dr. Rigler, give me just a

10:09:19 **14** second before you answer.

10:09:20 **15** THE WITNESS: Sure. Sorry.

10:09:20 **16** MS. O'DELL: Thank you.

10:09:20 **17 Q.** (By Mr. Chachkes) And one of the ways you

10:09:23 **18** do that is by -- you take the ratios of the peak

10:09:29 **19** areas of the metals to the silicon; right?

10:09:32 **20 A.** That's one way to do it.

10:09:33 **21 Q.** And if you were going to generate peak

10:09:40 **22** areas for your EDXA you could do that; right?

10:09:43 **23 A.** Yeah. I would say yes to that. Again, I

10:09:46 **24** would have to look at the package to see what's in

10:09:49 **25** there.

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10:10:59 **1** peak heights or peak areas can be used to determine

10:11:02 **2** the chemical composition of the subject of an EDXA

10:11:04 **3** analysis?

10:11:05 **4 A.** Well --

10:11:05 **5** MS. O'DELL: Object.

10:11:06 **6** THE WITNESS: -- if we step back a minute,

10:11:12 **7** these kinds of spectra are not the kinds of

10:11:15 **8** spectra that we get when we're doing something

10:11:17 **9** like mass spectrometer where we're really

10:11:20 **10** looking at an area under a peak. You can do

10:11:24 **11** peak heights on those, half width max types of

10:11:29 **12** estimates with those.

10:11:31 **13** These are spectrometers, and what they do

10:11:33 **14** is they collect data in electron channels for

10:11:37 **15** electron voltage. So typically what you do is

10:11:41 **16** you bombard your specimen with the electron beam

10:11:46 **17** for a period of time to get enough counts so

10:11:50 **18** that the peaks are stable at a stable height,

10:11:54 **19** and then you can compare the peak heights.

10:11:57 **20** So peak area, you know, for this kind of a

10:12:02 **21** spectrometer, again, you'll get different

10:12:04 **22** opinions, but it's not the same type of thing

10:12:07 **23** with the mass spectrometer. So peak heights

10:12:09 **24** work very well for these.

10:12:11 **25 Q.** (By Mr. Chachkes) Okay. It's not a

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10:09:49 **1 Q.** It's pretty fundamental. I would think

10:09:51 **2** all packages have that; right?

10:09:53 **3** MS. O'DELL: Object to the form.

10:09:54 **4** THE WITNESS: Yes, but they vary in the

10:09:55 **5** software, the way that the company has put the

10:09:59 **6** software together.

10:10:00 **7 Q.** (By Mr. Chachkes) Okay. So this process

10:10:02 **8** of comparing ratios of metals to silicon, are you

10:10:06 **9** comparing peak areas or just simply peak heights?

10:10:09 **10 A.** Again, that varies. In a lot of cases

10:10:13 **11** it's peak heights if you're working with -- depending

10:10:17 **12** on what your methodology is.

10:10:18 **13** For instance, I believe one of the

10:10:21 **14** standard methodologies for asbestos analysis is in

10:10:24 **15** the AHERA regulations, and I believe there they use

10:10:30 **16** peak ratios in that, which I believe are based on

10:10:33 **17** peak heights.

10:10:34 **18 Q.** Okay. And what about for an unknown

10:10:40 **19** chemical or crystal, what's more useful to determine

10:10:46 **20** the chemical composition, peak heights or peak areas?

10:10:49 **21** MS. O'DELL: Object to the form.

10:10:50 **22** THE WITNESS: Either one can be used,

10:10:51 **23** depending upon how you're calibrated.

10:10:54 **24 Q.** (By Mr. Chachkes) It's your belief that

10:10:55 **25** the peer-reviewed literature reflects that either

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10:12:12 **1** question about what works very well or --

10:12:15 **2 A.** Well, it is kind of a question about what

10:12:16 **3** works really well.

10:12:17 **4 Q.** Okay. Focus on my question.

10:12:18 **5 A.** I hear you, but you're kind of going to

10:12:21 **6** it --

10:12:21 **7 Q.** Focus on my question.

10:12:23 **8 A.** I'm focusing.

10:12:24 **9 Q.** The question is about peer-reviewed

10:12:27 **10** literature --

10:12:27 **11 A.** Let me just finish.

10:12:28 **12** MS. O'DELL: Sorry.

10:12:29 **13** THE WITNESS: Let me finish. I'm not

10:12:29 **14** finished.

10:12:30 **15** MS. O'DELL: Please finish.

10:12:33 **16** THE WITNESS: Okay. Peak heights work

10:12:34 **17** very well for this type of a spectrometer. Now,

10:12:38 **18** we can get in all the minutia of area versus

10:12:41 **19** peak height, but we have to know what kind of

10:12:44 **20** system that we're talking about.

10:12:46 **21 Q.** (By Mr. Chachkes) Same question.

10:12:47 **22 A.** Okay.

10:12:48 **23 Q.** Focus on what I'm asking, which is about

10:12:50 **24** the peer-reviewed literature.

25 A. Okay.

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10:12:51 **1** Q. In the peer-reviewed literature where
 10:12:53 **2** folks are looking at EDXA spectra to determine the
 10:12:57 **3** chemical composition of an unknown subject --
 10:13:00 **4** A. Okay.
 10:13:01 **5** Q. -- does the peer-reviewed literature
 10:13:04 **6** support both using peak heights and peak area to make
 10:13:07 **7** that determination?
 10:13:09 **8** MS. O'DELL: Object to the form.
 10:13:10 **9** THE WITNESS: I would have to review the
 10:13:12 **10** literature. Standard methods use peak height.
 10:13:19 **11** Some may use peak area also. So as far as that,
 10:13:22 **12** I would have to go and review it.
 10:13:24 **13** Q. (By Mr. Chachkes) When you say standard
 10:13:25 **14** methods, you mean in the peer-reviewed literature or
 10:13:28 **15** something else?
 10:13:28 **16** A. Sure. It would be -- if it's a standard
 10:13:31 **17** method it's going to be peer-reviewed.
 10:13:33 **18** Q. Okay. Looking at Exhibit 12 again, going
 10:13:40 **19** back to your EDXA printout, did you do a
 10:13:46 **20** comprehensive review of what minerals could
 10:13:50 **21** correspond to this EDXA spectra other than what you
 10:13:55 **22** believe it to be, which is tremolite?
 10:13:57 **23** A. I didn't do a comprehensive review of
 10:13:59 **24** this.
 10:13:59 **25** Q. Did anybody do a comprehensive review of
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10:38:03 **1** you record your time; correct?
 10:38:05 **2** A. As far as recording the time --
 10:38:08 **3** Q. Yes.
 10:38:09 **4** A. Yes, some of it, but not all of it.
 10:38:11 **5** Q. Okay. And who do you give those time
 10:38:13 **6** sheets to?
 10:38:13 **7** A. I don't -- as I say, I go in and speak to
 10:38:20 **8** Bill's assistant and then give her the hours that I
 10:38:25 **9** have.
 10:38:25 **10** Q. Is it your understanding that the other
 10:38:26 **11** people in your laboratory are giving their hours to
 10:38:28 **12** Bill's assistant?
 10:38:29 **13** A. I don't know what they're doing.
 10:38:31 **14** Q. Okay. Have they been instructed to keep
 10:38:33 **15** their time?
 10:38:33 **16** A. You'd have to ask Bill about that.
 10:38:36 **17** Q. Okay. So I'd like to request of
 10:38:37 **18** plaintiffs all invoices billed on behalf of the MDL
 10:38:41 **19** at MAS.
 10:38:46 **20** So let's --
 10:38:48 **21** A. I wanted to -- before we got started, I
 10:38:51 **22** wanted to bring up a point about the publications,
 10:38:52 **23** because I know you were asking about that.
 10:38:54 **24** Q. Okay.
 10:38:54 **25** A. And it is our policy at our laboratory to
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 10:14:02 **1** the EDXA spectra to determine what other minerals
 10:14:05 **2** they could correspond to?
 10:14:07 **3** A. A comprehensive review. What do you mean
 10:14:13 **4** by that?
 10:14:13 **5** Q. So, for example, if an expert in
 10:14:16 **6** mineralogy and EDXA mineralogy were to tell you this
 10:14:19 **7** spectra in Exhibit 12 can correspond to dozens if not
 10:14:24 **8** hundreds of other minerals, sitting here today, do
 10:14:26 **9** you have any reason to dispute that?
 10:14:27 **10** MS. O'DELL: Object to the form.
 10:14:29 **11** THE WITNESS: I would say that it could
 10:14:31 **12** correspond to a number of other minerals, yes.
 10:14:34 **13** MR. CHACHKES: Okay.
 10:14:35 **14** MS. O'DELL: Alex, excuse me. We've been
 10:14:38 **15** going about an hour, a little over an hour. Can
 10:14:40 **16** we take a short break, please?
 10:14:41 **17** MR. CHACHKES: Yeah. Let me see if I can
 10:14:43 **18** finish this part.
 10:14:44 **19** MS. O'DELL: Are you ready for a break,
 10:14:46 **20** Doctor?
 10:14:46 **21** THE WITNESS: Sure.
 10:14:48 **22** MR. CHACHKES: That's fine, we'll take a
 10:14:50 **23** break.
 10:14:51 **24** (Recess from 10:14 a.m. to 10:37 a.m.)
 10:38:00 **25** Q. (By Mr. Chachkes) We spoke earlier about
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 10:38:58 **1** not discuss any possible publications that we may
 10:39:02 **2** have pending. It's part of our policy, and it's
 10:39:06 **3** actually what we consider as proprietary.
 10:39:13 **4** MR. CHACHKES: I'm going to ask counsel
 10:39:14 **5** again, are you going to allow me to ask a full
 10:39:18 **6** set of questions about what the pending
 10:39:19 **7** publication is?
 10:39:20 **8** MS. O'DELL: No.
 10:39:20 **9** MR. CHACHKES: Okay. We'll raise it with
 10:39:21 **10** the magistrate.
 10:39:21 **11** MS. O'DELL: He's answered your question.
 10:39:23 **12** These are the invoices. It's two copies of one
 10:39:26 **13** invoice, and you're welcome to ask him questions
 10:39:28 **14** about it if you'd like.
 10:39:29 **15** MR. CHACHKES: Okay. And we're also
 10:39:30 **16** requesting all invoices from all people for who
 10:39:35 **17** do bill time, the analysts, Bill, the works.
 10:39:39 **18** MR. PARFITT: We'll take that under
 10:39:39 **19** advisement.
 10:39:39 **20** MS. O'DELL: Your request is noted. There
 10:39:43 **21** will be an objection to that.
 10:39:45 **22** MR. CHACHKES: Okay. Let's just mark --
 10:39:47 **23** let me see if these are different. Yeah.
 10:39:49 **24** MS. O'DELL: Let's see.
 10:39:51 **25** MR. CHACHKES: Yeah, they're different.
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10:39:51 **1** One is for 9,000 and one is for 14.
 10:39:54 **2** MS. O'DELL: Oh, yeah.
 10:39:56 **3** **Q.** (By Mr. Chachkes) By the way, did you
 10:39:59 **4** bring any documents with you today?
 10:40:00 **5** **A.** I did.
 10:40:00 **6** **Q.** What documents did you bring with you?
 10:40:02 **7** **A.** Let me get them out.
 10:40:11 **8** MS. O'DELL: May I see those just a minute
 10:40:13 **9** to make sure.
 10:40:19 **10** THE WITNESS: The request.
 10:40:20 **11** **Q.** (By Mr. Chachkes) You don't have to hand
 10:40:22 **12** them to me, just tell me what they are.
 10:40:24 **13** **A.** Okay. Let's see. This is the notice of
 10:40:27 **14** oral and videotaped deposition.
 10:40:28 **15** **Q.** Well, let me just ask this question. Did
 10:40:29 **16** you bring any documents that I might not already
 10:40:31 **17** have? So I have your report, I have the subpoena, I
 10:40:36 **18** have the things lawyers exchange. Is there
 10:40:40 **19** anything --
 10:40:40 **20** **A.** You have the quality report?
 10:40:42 **21** **Q.** Yes, we have the quality report; correct?
 10:40:45 **22** And you brought that?
 10:40:46 **23** **A.** I brought a copy of that. There was one
 10:40:48 **24** minor typographical error I found in that.
 10:40:50 **25** **Q.** We'll get to that.
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10:40:52 **1** **A.** Okay.
 10:40:52 **2** **Q.** Anything else you brought that I might not
 10:40:54 **3** otherwise have?
 10:40:55 **4** **A.** You probably have everything. I brought
 10:40:59 **5** the starting weight sheets, the weight sheets that
 10:41:04 **6** we've used for the analysis. I think you guys had
 10:41:09 **7** requested all of that. What else? And the reports.
 10:41:11 **8** The same ones that you have here.
 10:41:13 **9** **Q.** So starting weight sheets, have those been
 10:41:16 **10** produced?
 10:41:17 **11** **A.** Yeah, I think they were sent over.
 10:41:19 **12** MS. O'DELL: Yes, those were produced. I
 10:41:21 **13** have one more invoice. I would ask that you not
 10:41:24 **14** mark this one because I need a clean copy and I
 10:41:26 **15** don't know why I don't have one in my folder,
 10:41:29 **16** actually, so I'll get a copy at the break.
 10:41:31 **17** MR. CHACHKES: Okay. Do you mind if I
 10:41:32 **18** take a photo of it?
 10:41:33 **19** MS. O'DELL: No. You're welcome to.
 10:41:34 **20** MR. CHACHKES: Okay. We will start with
 10:41:35 **21** that and then we can --
 10:41:35 **22** MS. O'DELL: Yeah. I'll copy it at the
23 break. I just would prefer --
24 MR. CHACHKES: Oh, we'll copy it at the
25 break. So why don't we do this, why don't we --
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10:41:38 **1** MS. O'DELL: I just prefer that that not
 10:41:41 **2** be marked.
 10:41:42 **3** MR. CHACHKES: Why don't we hold up the
 10:41:43 **4** invoices until a break. I don't have to ask
 10:41:45 **5** about them now. We'll do it as a set. I don't
 10:41:47 **6** want to --
 10:41:47 **7** MS. O'DELL: Sure.
 10:41:48 **8** **Q.** (By Mr. Chachkes) Okay. All right. Back
 10:41:51 **9** to EDXA.
 10:41:52 **10** **A.** All right.
 10:41:54 **11** **Q.** So -- now, you're aware that crystals have
 10:42:05 **12** certain characteristic ratios of metals to silicon?
 10:42:08 **13** **A.** Yes.
 10:42:09 **14** **Q.** Okay. And are you aware that tremolite
 10:42:11 **15** has a ratio of 5-to-8?
 10:42:14 **16** **A.** It can vary.
 10:42:16 **17** **Q.** When you say it can vary, what do you mean
 10:42:19 **18** by that?
 10:42:19 **19** **A.** Well, it can vary. I mean, per the
 10:42:22 **20** formula based on how many metal ions that tremolite
 10:42:27 **21** has, it can vary a bit.
 10:42:29 **22** **Q.** When you say a bit, what's the margin
 10:42:32 **23** error there?
 10:42:33 **24** **A.** You know, as far as a margin of error,
 10:42:36 **25** peak height ratios, that type of thing, it just
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10:42:41 **1** varies. So, you know, it varies.
 10:42:45 **2** **Q.** Do you have any opinion sitting here today
 10:42:47 **3** as to what the peer-reviewed literature suggests as
 10:42:51 **4** the acceptable variations when you're looking at an
 10:42:54 **5** EDXA for determining a mineral from the
 10:42:58 **6** metal-to-silicon ratio?
 10:42:59 **7** MS. O'DELL: Object to form.
 10:43:01 **8** THE WITNESS: I would have to look at the
 10:43:05 **9** literature to see what they are because I know
 10:43:08 **10** over the years as I've looked at different
 10:43:11 **11** references, and I've noticed the slightly
 10:43:14 **12** different, you know, ratios for the same
 10:43:17 **13** material.
 10:43:18 **14** **Q.** (By Mr. Chachkes) Okay. Because the
 10:43:19 **15** ratio actually should be a certain number because
 10:43:22 **16** it's based on the chemical formula which is what the
 10:43:25 **17** definition of the mineral is; correct?
 10:43:27 **18** **A.** Well, yes, but by electron spectroscopy
 10:43:32 **19** you can have a variation in the energy depending upon
 10:43:36 **20** takeoff angle and this and that kind of thing,
 10:43:39 **21** depending on the material. So you can have some
 10:43:42 **22** variation there. You know, purely based on the
 10:43:44 **23** formula, again, using a spectrometer, you're going to
 10:43:48 **24** get some variation.
 10:43:48 **25** **Q.** Okay. But ideally the ratio is going to
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10:43:52 **1** be a definite number because it's based on the
10:43:57 **2** chemical formula, and the chemical formula for a
10:43:58 **3** mineral is set in stone, as it were?
4 MS. O'DELL: Object to the form.
10:44:02 **5** THE WITNESS: Well, again, now, if you're
10:44:03 **6** just talking about the formula, then, yes, you
10:44:05 **7** would have ratios based on the formula. You
10:44:08 **8** know, forget the EDXA for a minute.
10:44:10 **9** But based on the chemical formula and the
10:44:12 **10** loading of the ions, you know, in that formula,
10:44:15 **11** you're going to have, you know, a set amount
10:44:19 **12** there. But when it comes to the actual
10:44:21 **13** spectroscopy you're going to have a little bit
10:44:23 **14** of variation.
10:44:24 **15** Q. (By Mr. Chachkes) Okay. And just by way
10:44:25 **16** of example, anthophyllite, the chemical formula, has
10:44:29 **17** seven magnesiums, eight silicon; right?
10:44:32 **18** A. Uh-huh.
10:44:33 **19** Q. Is that a yes?
10:44:34 **20** A. Yes.
21 Q. I'm sorry --
10:44:38 **22** A. I t's okay.
10:44:38 **23** Q. -- show up on the transcript.
10:44:38 **24** And then that ratio of 7-to-8 is the ideal
10:44:44 **25** metal-to-silicon ratio under EDXA for anthophyllite?
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10:44:48 **1** A. Well, no, that's for the formula. That
10:44:50 **2** would be for the formula. Once again, when you get
10:44:53 **3** to a spectroscopic method, it's going to vary a bit.
10:44:57 **4** Q. So did you -- so in Exhibit 12, do you see
10:45:03 **5** how tremolite is written there at the top?
10:45:05 **6** A. Yes.
10:45:05 **7** Q. That's not what the machine generated
10:45:07 **8** based on the spectra; you typed that in; correct?
10:45:12 **9** A. The analyst typed that in, yes. But that
10:45:14 **10** correlates with tremolite, with a tremolite spectrum.
10:45:18 **11** Q. And so do you expect in this Exhibit 12
10:45:25 **12** EDXA spectra that the ratio of metal to silicon is
10:45:31 **13** going to be 5-to-8 or somewhere in the vicinity of
10:45:34 **14** 5-to-8?
10:45:35 **15** A. I t could be, yes.
10:45:36 **16** Q. And when you say it could be, would you
10:45:42 **17** identify something that has a metal-to-silicon ratio
10:45:45 **18** nowhere near 5-to-8 as tremolite under EDXA?
10:45:49 **19** MS. O'DELL: Object to the form.
10:45:50 **20** THE WITNESS: Can you just restate the
10:45:52 **21** question, please?
10:45:53 **22** Q. (By Mr. Chachkes) Okay. What margin of
10:45:54 **23** error in the metal-to-silicon ratio would be so great
10:45:59 **24** that you would say, well, that's not tremolite?
10:46:02 **25** A. Well, again, if, for instance, in this
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10:46:07 **1** spectrum, in Number 12, if the magnesium was up in
10:46:11 **2** the middle somewhere up high towards the silicon
10:46:14 **3** peak, you might have a question about it at that
10:46:16 **4** point. If the calcium peak was down lower, then you
10:46:20 **5** might have a question about it at that point too.
10:46:22 **6** So you can get some variation again like
10:46:26 **7** that, depending upon the mineralogy of tremolite in
10:46:29 **8** that area. So again, you're going to have a little
10:46:32 **9** bit of variation. But if it's too far away from
10:46:35 **10** that, then, yeah, there's a question about that.
10:46:37 **11** Q. Do you have any opinions sitting here
10:46:39 **12** today whether the EDXA spectra in 12 is more like
10:46:44 **13** another mineral than tremolite?
10:46:47 **14** MS. O'DELL: Object to the form.
10:46:48 **15** THE WITNESS: Well, I don't have an
10:46:50 **16** opinion on that right now.
10:46:52 **17** Q. (By Mr. Chachkes) And so did you actually
10:46:55 **18** run the metal-to-silicon ratios for your EDXA?
10:46:59 **19** MS. O'DELL: Object to the form.
10:47:00 **20** THE WITNESS: I didn't run it, no.
10:47:02 **21** Q. (By Mr. Chachkes) Okay. Did anybody run
10:47:03 **22** it?
10:47:03 **23** A. I don't know. I would have to check.
10:47:04 **24** Q. As the author of the expert report that
10:47:09 **25** has these EDXA spectra upon which you're making
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10:47:12 **1** conclusions, wouldn't that be important information
10:47:14 **2** to know?
10:47:14 **3** MS. O'DELL: Object to the form.
10:47:21 **4** MS. PARFITT: Objection.
10:47:22 **5** THE WITNESS: The information that we have
10:47:23 **6** from the spectrometer is accurate, and the peak
10:47:29 **7** ratios that you see here are consistent with
10:47:34 **8** tremolite. It could be consistent with some
10:47:37 **9** other minerals. That's why we do not use EDS;
10:47:42 **10** that's why we would do electron diffraction, and
10:47:45 **11** we also look at the shape and the form of the
10:47:47 **12** material, too. So those things together allow
10:47:51 **13** us to say, yeah, this is tremolite.
10:47:53 **14** Q. (By Mr. Chachkes) Okay. Do you go into
10:47:54 **15** the EDXA -- do you take the EDXA spectra, say, I'm
10:48:02 **16** going to assume it's an asbestos and now I'm going to
10:48:05 **17** figure out which one? You don't do that, do you?
10:48:07 **18** MS. O'DELL: Object to the form.
10:48:08 **19** THE WITNESS: Typically what happens is
10:48:12 **20** the analyst will take a spectrum, they'll look
10:48:17 **21** at the spectrum, then they will flip over -- and
10:48:20 **22** they're in the same spot, they'll refigure the
10:48:24 **23** scope, and then they will do electron
10:48:26 **24** diffraction.
10:48:26 **25** They'll look at the diffraction pattern,
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10:48:28 **1** and then they will make a decision at that
 10:48:29 **2** particular point as to whether it's consistent
 10:48:32 **3** with that form or not. Then they'll index the
 10:48:35 **4** pattern. They'll confirm that with verification
 10:48:38 **5** of the indexing of the pattern.
 10:48:39 **6** **Q.** (By Mr. Chachkes) Okay. So the EDXA --
 10:48:44 **7** so the judgment call by the analyst to what mineral
 10:48:48 **8** they're looking at is based on a combined looking at
 10:48:51 **9** the EDXA spectra and the SAED?
 10:48:56 **10** **A.** Yes, and also the form. The form.
 10:49:02 **11** **Q.** And when you say the form, what do you
 10:49:03 **12** mean, the form?
 10:49:04 **13** **A.** Well, for instance, if it's a round
 10:49:09 **14** structure or something that is not fibrous or
 10:49:12 **15** crystalline as you would expect tremolite to be,
 10:49:14 **16** then, you know, it's a guess as it could be some
 10:49:17 **17** other form.
 10:49:19 **18** **Q.** Can you cite to me any peer-reviewed
 10:49:21 **19** literature or textbook, even, that says taking
 10:49:26 **20** simultaneously the data from an EDXA, SAED, and the
 10:49:32 **21** form is the proper way to identify a mineral?
 10:49:37 **22** **MS. O'DELL:** Object to the form.
 10:49:38 **23** **THE WITNESS:** Well, I mean, if you want to
 10:49:39 **24** look at the way EPA said to do it and continues
 10:49:42 **25** to say to do it, you know, in the '70s and the
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10:49:47 **1** '80s and was published, this is the way to do
 10:49:50 **2** it.
 10:49:50 **3** **Q.** (By Mr. Chachkes) Okay. So you've cited
 10:49:52 **4** the EPA. Anything else, any other published sources?
 10:49:55 **5** **A.** It's also done -- there are a number
 10:49:57 **6** of ASTM -- they are referenced here in our report.
 10:49:59 **7** **Q.** Okay. Is it your opinion that 22262
 10:50:03 **8** sanctions that methodology?
 10:50:05 **9** **A.** To my knowledge, yes.
 10:50:06 **10** **Q.** Okay. And when you say EPA, what document
 10:50:09 **11** are you referring to?
 10:50:10 **12** **A.** That would be the AHERA document.
 10:50:15 **13** CFR 763.
 10:50:15 **14** **Q.** And so if you're cited CFR -- say it
 10:50:21 **15** again?
 10:50:21 **16** **A.** 763.
 10:50:22 **17** **Q.** 763?
 10:50:23 **18** **A.** Yep.
 10:50:23 **19** **Q.** And then we cited 22262. Any other
 10:50:26 **20** document that supports your methodological approach?
 10:50:29 **21** **A.** Let me look here. We've referenced them
 10:50:32 **22** here. There are a couple of ASTMs too. There's an
 10:50:36 **23** ISO document -- well, the ISO is the 22 -- let me see
 10:50:39 **24** which ones we've got.
 10:50:45 **25** The ASTM D5755-09, D5756, the ISO 10312,
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10:51:03 **1** and there's also ISO 13794. The EPA one's here, it's
 10:51:12 **2** 40 CFR part 763. They're on page 11 of the report.
 10:51:19 **3** **Q.** Okay. Any other published literature that
 10:51:21 **4** approves of this method that you're using?
 10:51:23 **5** **MS. O'DELL:** Object to the form.
 10:51:25 **6** **THE WITNESS:** Probably there are, but
 10:51:28 **7** these are major standards that are used.
 10:51:32 **8** **Q.** (By Mr. Chachkes) Sitting here today can
 10:51:33 **9** you think of any others?
 10:51:34 **10** **A.** I'm trying to think of them. As I sit
 10:51:40 **11** here, I can't, but I know there are some others.
 10:51:42 **12** **Q.** Okay.
 10:51:42 **13** **A.** Yeah.
 10:51:43 **14** **Q.** Now, let's take, for example, 22262.
 10:51:48 **15** There's a section on EDXA; correct?
 10:51:54 **16** **A.** To my knowledge there is, yes.
 10:51:55 **17** **Q.** Right. And there's a section on SAED?
 10:51:58 **18** **A.** I would have to look at it. I don't have
 10:52:00 **19** it right in front me.
 10:52:01 **20** **Q.** Okay.
 10:52:01 **21** **A.** If you've got it, I'll look at it. I
 10:52:03 **22** don't have it right in front of me.
 10:52:03 **23** **Q.** Does 22262 expressly say you consider the
 10:52:08 **24** EDXA and SAED together even though that independently
 10:52:12 **25** they may be inconclusive?
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10:52:13 **1** **A.** I --
 10:52:13 **2** **MS. O'DELL:** Excuse me.
 10:52:15 **3** **Dr. Rigler,** I've got a copy here that was
 10:52:17 **4** marked, if you need to see 22262-2. I'll
 10:52:20 **5** provide it to you if counsel will not do that.
 10:52:23 **6** **THE WITNESS:** Okay.
 10:52:23 **7** **Q.** (By Mr. Chachkes) Let me ask this
 10:52:24 **8** question. Are you able to answer the question --
 10:52:26 **9** **MS. PARFITT:** Give him a chance to look at
 10:52:28 **10** the document.
 10:52:28 **11** **MR. CHACHKES:** I'm going to ask the
 10:52:30 **12** question. You can --
 10:52:30 **13** **MS. PARFITT:** No. Give him a chance,
 10:52:30 **14** Alex --
 10:52:30 **15** **Q.** (By Mr. Chachkes) Can you answer --
 10:52:33 **16** **MS. PARFITT:** Alex, he's not going to
 10:52:34 **17** answer the question.
 10:52:34 **18** **Q.** (By Mr. Chachkes) Can you answer the
 10:52:35 **19** question without being given the document? That's a
 10:52:37 **20** simple question. Can you --
 10:52:37 **21** **MS. PARFITT:** We need to --
 10:52:38 **22** **MR. CHACHKES:** Are you going to shut that
 10:52:40 **23** down?
 10:52:40 **24** **MS. PARFITT:** I'm going to tell him to
 10:52:41 **25** look at the document. The appropriate thing --
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10:52:43 **1** MR. CHACHKES: Okay. Another list for the
 10:52:43 **2** magistrate.
3 Go ahead.
 10:52:45 **4** MS. PARFITT: Excuse me. Let's make it
 10:52:46 **5** clear. So the question for the magistrate is
 10:52:48 **6** when you talk about a document and the witness
 10:52:50 **7** wants to see it, you want to bring up to the
 10:52:53 **8** magistrate that you aren't going to give it to
 10:52:55 **9** him? Is that the subject matter?
 10:52:56 **10** MR. CHACHKES: Let's look at the
 10:52:57 **11** transcript. Did he say he wanted to see it?
 10:52:58 **12** You said he wanted to see it.
 10:52:59 **13** MS. PARFITT: Dr. Rigler, would you like
 10:53:02 **14** to see the document?
 10:53:02 **15** THE WITNESS: Sure.
 10:53:03 **16** MS. PARFITT: Thank you.
 10:53:04 **17** MR. CHACHKES: All right.
 10:53:05 **18** MS. PARFITT: It's amusing, isn't it? Why
 10:53:08 **19** don't you act appropriate.
 10:53:09 **20** Q. (By Mr. Chachkes) Anyway, is it your
 10:53:10 **21** opinion that 22262 says you can take an inconclusive
 10:53:15 **22** EDXA and you can take an inconclusive SAED and
 10:53:19 **23** together make a determination of what mineral you're
 10:53:22 **24** looking at?
 10:53:23 **25** MS. O'DELL: Object to the form.
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10:53:24 **1** THE WITNESS: I would have to take a break
 10:53:26 **2** to read it and review it, and then I can give
 10:53:28 **3** you an answer to that question.
 10:53:29 **4** Q. (By Mr. Chachkes) Okay. Sitting here
 10:53:29 **5** today, you can't answer that off the top of your
 10:53:32 **6** head?
 10:53:32 **7** MS. PARFITT: Objection. Misstates his
 10:53:34 **8** testimony.
9 THE WITNESS: That's right.
10 Q. (By Mr. Chachkes) Okay.
 10:53:34 **11** A. I could give you an answer. I just need
 10:53:36 **12** some time to review the document.
 10:53:37 **13** Q. Okay. And is it the same answer for the
 10:53:38 **14** other standards that you cited? Sitting here today,
 10:53:42 **15** could you tell me just off the top of your head
 10:53:44 **16** whether those other standards that you cited allow
 10:53:47 **17** for someone to take an inconclusive SAED and
 10:53:50 **18** inconclusive EDXA together with maybe a visual
 10:53:56 **19** morphology decision and judge what mineral you're
 10:53:59 **20** looking at?
 10:54:00 **21** MS. O'DELL: Object to the form.
 10:54:00 **22** THE WITNESS: Well, the answer to the
 10:54:02 **23** question is these parts are required to be able
 10:54:09 **24** to come up with an answer of what the mineral
 10:54:11 **25** is.
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10:54:11 **1** So, yes, you start with an inconclusive;
 10:54:15 **2** yes, you start with an inconclusive; yes, you
 10:54:17 **3** start with an inconclusive; and you put those
 10:54:19 **4** together to come up with a conclusive answer.
 10:54:21 **5** Q. (By Mr. Chachkes) Okay.
 10:54:21 **6** A. Yep.
 10:54:22 **7** Q. At a break I would like you to look at
 10:54:26 **8** your document --
 10:54:28 **9** A. Okay.
 10:54:28 **10** Q. -- and specifically look for somewhere
 10:54:30 **11** where it says you can take three separate and
 10:54:32 **12** independent inconclusive analytical results and
 10:54:36 **13** combine them to make a conclusive result. Okay?
 10:54:43 **14** MS. O'DELL: Object to the form.
 10:54:44 **15** THE WITNESS: Well, let me just state that
 10:54:48 **16** in science, one of the best ways to come up with
 10:54:51 **17** a good answer is use multiple techniques to be
 10:54:54 **18** able to make a conclusion. You use one
 10:54:57 **19** particular technique, that's good. You use
 10:55:02 **20** another technique in conjunction with that,
 10:55:04 **21** that's better. Use three techniques in
 10:55:07 **22** conjunction with that, that's very good.
 10:55:09 **23** So typically this is the way that we work
 10:55:13 **24** as scientists. So that's the way that these
 10:55:19 **25** documents are written, you know. Again, a good
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10:55:22 **1** example is AHERA as to how they would do that,
 10:55:24 **2** they want the scientists to do it.
 10:55:25 **3** Q. (By Mr. Chachkes) Will you do me that
 10:55:28 **4** favor of during a break look at 22262 and coming up
 10:55:31 **5** with your specific opinion as to whether it allows
 10:55:34 **6** for someone to take an inconclusive -- three
 10:55:37 **7** inconclusive results, combine them for a conclusive
 10:55:39 **8** result?
 10:55:39 **9** MS. O'DELL: Object to the form.
 10:55:40 **10** And you're not required to do any homework
 10:55:42 **11** for counsel during a break.
 10:55:45 **12** Q. (By Mr. Chachkes) Okay. So you will not
 10:55:48 **13** during a break do that; correct?
 10:55:49 **14** MS. PARFITT: You want him to do it right
 10:55:51 **15** now? It's on your time.
 10:55:53 **16** MR. CHACHKES: It's a question for the
 10:55:54 **17** witness.
 10:55:54 **18** MS. PARFITT: The question for the witness
 10:55:56 **19** is -- you were asking him to do homework off the
 10:55:59 **20** record on his break; am I correct? Is that what
 10:56:01 **21** you're asking him?
 10:56:02 **22** MR. CHACHKES: He has a --
 10:56:02 **23** MS. PARFITT: Let me ask you a question.
 10:56:03 **24** MR. CHACHKES: If you're just going to
 10:56:04 **25** talk over me, there's no conversation here.
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10:56:05 **1** MS. PARFITT: You know, Alex, you have a
 10:56:07 **2** difficult time talking over people as well, so
3 I'm not trying to --
 10:56:10 **4** MR. CHACHKES: I'll let you finish. Go
5 ahead.
6 MS. PARFITT: Thank you. I appreciate
 10:56:13 **7** that. It's very kind of you.
 10:56:13 **8** Are you asking him to do a project for you
 10:56:16 **9** on his break; is that what you're asking him?
 10:56:18 **10** MR. CHACHKES: He has come here as an
 10:56:20 **11** expert on the subject matter of how one
 10:56:21 **12** determines whether there's asbestos in talc, and
 10:56:23 **13** he has testified that there are various
 10:56:24 **14** standards by which they sanction his
 10:56:27 **15** methodology. I want a specific opinion as to
 10:56:30 **16** how indeed that happens.
 10:56:32 **17** So he should be able to do that. He
 10:56:34 **18** should have come prepared for that. So I want
 10:56:35 **19** him to read the document and come back with
 10:56:38 **20** specifics. That's what I want.
 10:56:39 **21** MS. PARFITT: Well, I think there may be a
 10:56:41 **22** miscommunication. I don't think he's telling
 10:56:43 **23** you he can't do it. The difference is if you
 10:56:46 **24** want to ask him that question, he goes through
 10:56:48 **25** it right now while we're on the record, that's

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10:57:36 **1** MR. CHACHKES: And I would appreciate in
 10:57:37 **2** the future when I ask those questions you don't
3 tell the witness how the appropriate manner is,
 10:57:39 **4** that he is allowed to finish answering the
 10:57:40 **5** questions.
 10:57:41 **6** MS. PARFITT: Well, let's not trip a
 10:57:43 **7** witness. I think let's have a very honest
 10:57:45 **8** discussion with the witness, all right?
 10:57:46 **9** So that's what we're trying to do is have
 10:57:49 **10** an honest discussion with the witness, and I see
 10:57:55 **11** you're trying to do that.
 10:57:55 **12** Q. (By Mr. Chachkes) Okay. So you said the
 10:57:58 **13** analyst is simultaneously doing an EDXA and an SAED;
14 correct?
 10:58:03 **15** A. They can.
 10:58:03 **16** Q. They can.
 10:58:04 **17** A. Well, I mean, simultaneously -- you have
 10:58:06 **18** to do one at a time, but you can do them essentially
 10:58:11 **19** in the same sitting.
 10:58:12 **20** Q. Would the analyst -- would it be
 10:58:15 **21** appropriate for an analyst to take something like
 10:58:18 **22** Exhibit 12 without having done the SAED yet, without
 10:58:20 **23** having done visual morphology yet, to make a
 10:58:23 **24** conclusion about what mineral they're looking at?
 10:58:26 **25** A. Well, that's not the way we do it.

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10:56:51 **1** fine.
 10:56:51 **2** MR. CHACHKES: I'll tell you what we'll
 10:56:53 **3** do. I plan to finish without exhausting my
 10:56:56 **4** seven-hour time. If it takes a few hours to go
 10:57:00 **5** through documents, we'll do that at the end,
6 okay?
7 MS. PARFITT: Go through --
8 THE WITNESS: Well, I think --
 10:57:02 **9** MR. CHACHKES: He can do it on the record.
 10:57:02 **10** He can just sit there reading the documents on
 10:57:04 **11** the record. We'll stay here until 9:00 if
 10:57:06 **12** that's what's required.
 10:57:08 **13** MS. PARFITT: That's fine.
 10:57:11 **14** MR. CHACHKES: Okay. I mean, right now I
 10:57:13 **15** understand the dispute to be not whether he can
 10:57:17 **16** go through the documents and give me the answer.
 10:57:18 **17** You just want it on the record.
 10:57:19 **18** MS. PARFITT: What I would like to have on
 10:57:20 **19** the record is your question and his response and
 10:57:22 **20** he will tell you -- since I'm not testifying --
 10:57:24 **21** he will tell you whether he can respond in kind
 10:57:27 **22** to your question and in an appropriate manner.
 10:57:30 **23** If the appropriate manner for him to respond to
 10:57:33 **24** your question requires him to look at something,
 10:57:36 **25** then he's entitled to do it.

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10:58:30 **1** Q. Would it be appropriate to do it that way?
 10:58:32 **2** A. I'm telling you that's the way we do it.
 10:58:33 **3** Q. The question is as an expert in the area,
 10:58:35 **4** is it appropriate to do it? If they did it, would it
 10:58:37 **5** be inappropriate?
 10:58:38 **6** A. They could do it.
 10:58:39 **7** MS. O'DELL: Object to the form.
 10:58:40 **8** THE WITNESS: They could do it if they
 10:58:41 **9** wanted to, but that's not the way we do it.
 10:58:43 **10** Q. (By Mr. Chachkes) Okay. And it wouldn't
 10:58:44 **11** be inappropriate -- when I say inappropriate, bad
 10:58:47 **12** science?
 10:58:48 **13** MS. O'DELL: Object to the form.
 10:58:49 **14** THE WITNESS: Bad science? I don't know
 10:58:51 **15** what you mean by that.
 10:58:52 **16** Q. (By Mr. Chachkes) Okay. So something
 10:58:55 **17** that would not give you within a reasonable degree of
 10:59:00 **18** scientific certainty the conclusion that, ah, this is
 10:59:01 **19** the mineral I'm looking at?
 10:59:02 **20** A. Well, they would want to do that. They
 10:59:05 **21** would be required to do that at our laboratory.
 10:59:07 **22** Q. Yeah.
 10:59:08 **23** A. They wouldn't just look at one of these
 10:59:09 **24** and say, yeah, it's tremolite.
 10:59:11 **25** Q. Okay. But I'm asking -- it's not

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10:59:12 **1** empirically what's going on, so focus on the
 10:59:15 **2** question. The question is, is it bad science to take
 10:59:17 **3** only, like in Exhibit 12, EDXA and a spectrum and
 10:59:25 **4** make a conclusion about the mineral?
 10:59:27 **5** MS. O'DELL: Object to the form.
 10:59:28 **6** THE WITNESS: Is it bad science? It's
 10:59:31 **7** observation. They can make an observation which
 10:59:33 **8** may lead them to additional kinds of
 10:59:37 **9** observations. You may take an expert in
 10:59:40 **10** mineralogy who looks at this and goes yeah, it's
 10:59:43 **11** tremolite. You may take an expert in mineralogy
 10:59:46 **12** in academia that would say it was.
 10:59:49 **13** Q. (By Mr. Chachkes) Okay. So it is good
 10:59:50 **14** science to take something like the EDXA printout in
 10:59:54 **15** isolation and say I know what mineral that is?
 10:59:55 **16** MS. O'DELL: Object to the form.
 10:59:56 **17** Misstates his testimony.
 10:59:57 **18** THE WITNESS: Right, we -- again, that's
 10:59:59 **19** not the way that we do that at our laboratory.
 11:00:01 **20** And you may have an academic that does that
 11:00:03 **21** who's a crystallographer or mineralogist who
 11:00:06 **22** looks at that and goes, yeah, it's tremolite.
 11:00:09 **23** Q. (By Mr. Chachkes) So what is your
 11:00:16 **24** recommended procedure for -- when is the tremolite
 11:00:18 **25** typed in the top? Is it right after the EDXA
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11:00:20 **1** printout comes up?
 11:00:21 **2** A. Well, as I say, they've done the
 11:00:25 **3** diffraction, they've looked at this. They may do
 11:00:28 **4** another EDS on this to verify what they got to start
 11:00:31 **5** with, and then they would probably type that in there
 11:00:34 **6** then.
 11:00:34 **7** Q. Okay. I've seen no sample for which there
 11:00:36 **8** are two EDS. Does that mean we have not received
 11:00:39 **9** these duplicate EDS runs?
 11:00:42 **10** MS. O'DELL: Object to the form.
 11:00:43 **11** THE WITNESS: Well, no. Again, they may
 11:00:46 **12** do -- they may start to do an EDS on that, go,
 11:00:51 **13** yeah, that looks like tremolite, let me do the
 11:00:53 **14** diffraction on this, right, and then they may
 11:00:55 **15** come back and do a 300 seconds on the EDS.
 11:00:59 **16** So, you know, they're not going to call it
 11:01:01 **17** unless they're sure of it from the diffraction.
 11:01:05 **18** Q. (By Mr. Chachkes) Do you have a policy at
 11:01:08 **19** MAS for the order in which the various analyses are
 11:01:10 **20** done?
 11:01:10 **21** A. Well, we have a protocol for that --
 11:01:13 **22** Q. Okay.
 11:01:13 **23** A. -- yeah.
 11:01:13 **24** Q. Is it written?
 11:01:14 **25** A. To my knowledge, yes.

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11:01:15 **1** Q. Okay. I would ask that that be produced.
 11:01:18 **2** Sitting here now, do you remember what
 11:01:20 **3** that protocol is, which comes first, like EDS or SAED
 11:01:27 **4** or visual morphology under TEM?
 11:01:29 **5** A. Yeah, I want to say that it is EDS first,
 11:01:31 **6** and then they do the diffraction, but I would have to
 11:01:35 **7** look and see what it is.
 11:01:37 **8** Q. Do the analysts type in the mineral
 11:01:41 **9** identification at the top of the printout at the time
 11:01:45 **10** they do the EDS before they do the diffraction?
 11:01:48 **11** MS. O'DELL: Object to the form. Asked
 11:01:49 **12** and answered.
 11:01:49 **13** THE WITNESS: Again, I would have to -- I
 11:01:52 **14** would have to see. I can't recall right now.
 11:01:55 **15** They're not going to type that on there unless
 11:01:57 **16** they're sure that -- understand that.
 11:01:59 **17** Q. (By Mr. Chachkes) It's a question
 11:02:00 **18** about timing.
 11:02:01 **19** A. Yes, I understand the question about
 11:02:03 **20** timing. I get that. I get it.
 11:02:04 **21** They can start to do an EDS, then they can
 11:02:07 **22** do diffraction, and then they can make the call on
 11:02:11 **23** that. They're not going to make the call unless
 11:02:13 **24** they're sure.
 11:02:14 **25** Q. Do you know whether the -- so it's
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11:02:18 **1** possible that they go back into the software after
 11:02:22 **2** the diffraction and type in the name of the mineral
 11:02:26 **3** at the top of the EDS?
 11:02:27 **4** MS. O'DELL: Object to the form.
 11:02:28 **5** THE WITNESS: I don't know. I would have
 11:02:29 **6** to find out. But again, they're not going to
 11:02:32 **7** type that in there unless they're sure of it.
 11:02:34 **8** Q. (By Mr. Chachkes) Okay.
 11:02:34 **9** A. That's what you need to understand.
 11:02:35 **10** Q. Yeah, I know -- I understand your --
 11:02:35 **11** A. I want you to understand that. You don't
 11:02:37 **12** seem to understand that.
 11:02:38 **13** Q. You have said that ten times --
 11:02:39 **14** A. Good.
 11:02:40 **15** Q. -- it's on the record --
 11:02:41 **16** A. I want to make it clear.
 11:02:42 **17** Q. What I understand or don't understand is
 11:02:43 **18** really not at issue. It's what you understand, okay?
 11:02:46 **19** Do you understand that?
 11:02:46 **20** A. Sure.
 11:02:48 **21** Q. Okay.
 11:02:48 **22** A. And what I'm telling you is it's not typed
 11:02:50 **23** on there unless they're sure of it.
 11:02:52 **24** Q. All right. Now you've said that many
 11:02:52 **25** times.

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11:02:53 **1** A. I can say it again.
 11:02:54 **2** Q. Okay. And so do you -- I guess I'd have
 11:02:59 **3** to talk to the analyst to figure out how they do
 11:03:01 **4** this.
 11:03:01 **5** MS. O'DELL: Object to form.
 11:03:02 **6** THE WITNESS: You can talk to Dr. Longo
 11:03:03 **7** and he can also tell you.
 11:03:04 **8** Q. (By Mr. Chachkes) Yeah, but he's not
 11:03:05 **9** doing the runs either, is he?
 11:03:07 **10** A. Well, he directs the lab.
 11:03:08 **11** Q. All right.
 11:03:08 **12** A. So it's his responsibility.
 11:03:10 **13** Q. Okay. And looking at Exhibit 12, the
 11:03:18 **14** EDXA, what tells you that this is tremolite?
 11:03:20 **15** A. The peak sets that you have here.
 11:03:23 **16** Q. Okay. And when you say -- walk me through
 11:03:26 **17** that.
 11:03:26 **18** A. The peak sets?
 11:03:27 **19** Q. Yes. Why are these peak sets tremolite
 11:03:30 **20** and not some other mineral?
 11:03:32 **21** A. Some other mineral. Well, again, until
 11:03:35 **22** you do the diffraction, you may not be completely
 11:03:38 **23** sure of it, but the mag and the silicon ratios look
 11:03:42 **24** correct and as well as the calcium ratios for
 11:03:44 **25** tremolite.
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11:05:10 **1** actinolite?
 11:05:12 **2** A. Well -- it looks more like talc than
 11:05:19 **3** actinolite, you're saying?
 11:05:20 **4** Q. Yeah.
 11:05:21 **5** A. I'd have to think about that. It's
 11:05:23 **6** possible. Yeah, it's possible.
 11:05:25 **7** Q. Okay. And what would you be looking for?
 11:05:27 **8** A. Well, depending upon how much iron was in
 11:05:33 **9** there. You know, you can have fibrous talc that
 11:05:35 **10** would have, you know, some iron with it, that kind of
 11:05:39 **11** thing. So it would just depend on the -- it would
 11:05:41 **12** depend on the form and look at the diffraction
 11:05:43 **13** pattern.
 11:05:43 **14** Q. Is there an EDXA in isolation that you
 11:05:47 **15** would say that's definitely talc, it is not
 11:05:50 **16** actinolite?
 11:05:50 **17** A. Yeah, I mean, again, if the iron -- if it
 11:05:56 **18** practically has no iron and you're looking at the
 11:05:58 **19** form of it and it's a plate, you go, well, yeah,
 11:06:01 **20** that's most likely talc; you do the diffraction on
 11:06:05 **21** it, it's most likely talc.
 11:06:06 **22** Q. So you brought in form, you brought in
 11:06:07 **23** diffraction --
 11:06:08 **24** A. Right.
 11:06:08 **25** Q. -- so I'm saying let's put those aside.
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11:03:45 **1** Now, there's a small iron peak there. If
 11:03:47 **2** that iron peak was increased significantly, it would
 11:03:50 **3** be actinolite.
 11:03:52 **4** Q. Okay. Are there any instances where your
 11:04:01 **5** analysts get an EDS printout or spectra and say, ah,
 11:04:09 **6** that's not an asbestos?
 11:04:12 **7** A. I'm sure there are, yeah, yes.
 11:04:14 **8** Q. Okay. Give me an instance where there's
 11:04:16 **9** magnesium silicon peaks. What --
 11:04:18 **10** MS. O'DELL: Object to the form.
 11:04:18 **11** Q. (By Mr. Chachkes) What were they looking
 11:04:20 **12** for?
 11:04:20 **13** MS. O'DELL: Object to the form.
 11:04:21 **14** Incomplete hypothetical.
 11:04:23 **15** THE WITNESS: Well, they may be looking at
 11:04:27 **16** certain types of clay minerals that may have a
 11:04:31 **17** mag-silicon ratio. You know, forget the calcium
 11:04:34 **18** for a minute. But they may go, well, you know,
 11:04:36 **19** that's not talc. They may do a diffraction on
 11:04:39 **20** it and they get some diffuse pattern, something
 11:04:42 **21** like that, and they go, you know, it's not that
 11:04:44 **22** so they'll move on. Essentially it's sort of a
 11:04:48 **23** screening process.
 11:04:49 **24** Q. (By Mr. Chachkes) Okay. Are there
 11:05:00 **25** instances where an EDXA looks more like talc than
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11:06:10 **1** Just in isolation, just looking at the EDXA, is there
 11:06:13 **2** an EDXA that in isolation you can say that's
 11:06:15 **3** definitely talc, it's not actinolite?
 11:06:17 **4** MS. O'DELL: Object to the form.
 11:06:18 **5** THE WITNESS: Again, if it had no iron --
 11:06:24 **6** I mean, you're looking at the thing. It's not
 11:06:26 **7** like you're not looking at it. It's on the
 11:06:28 **8** screen in front of you, so you can't divorce
 11:06:30 **9** that from it. So if I'm looking at the form of
 11:06:32 **10** it, I can tell whether it's platy or whether
 11:06:33 **11** it's fibrous.
 11:06:35 **12** Q. (By Mr. Chachkes) Okay. Is there an
 11:06:38 **13** instance -- there's an EDXA in isolation that you
 11:06:42 **14** know is definitely tremolite and not actinolite?
 11:06:45 **15** MS. O'DELL: Object to the form.
 11:06:47 **16** THE WITNESS: No. No, not in isolation.
 11:06:49 **17** Q. (By Mr. Chachkes) Okay. Do your analysts
 11:07:02 **18** record peak heights?
 11:07:03 **19** A. Do they record peak heights?
 11:07:06 **20** Q. Yes.
 11:07:06 **21** A. I don't think so.
 11:07:07 **22** Q. Okay. Do they record peak areas?
 11:07:10 **23** A. Again, the software does that.
 11:07:12 **24** Q. The judgment that your analysts make when
 11:07:17 **25** they're typing in the top of the EDXA of this
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11:07:19 **1** mineral --

11:07:20 **2** **A.** Yes.

11:07:20 **3** **Q.** -- as far as the EDXA printout goes, it's

11:07:22 **4** qualitative, not quantitative?

11:07:24 **5** **A.** Well, yeah, it is a qualitative analysis

11:07:28 **6** as they're looking at this.

11:07:29 **7** **Q.** And do you understand, when I say

11:07:31 **8** qualitative, it's not based on precise numbers, it's

11:07:34 **9** based on kind of their eyeball look at it?

11:07:36 **10** MS. O'DELL: Object to the form.

11:07:37 **11** THE WITNESS: That's the way most, I would

11:07:40 **12** say, laboratories do this.

11:07:41 **13** **Q.** (By Mr. Chachkes) So you include a lot of

11:07:48 **14** SAED patterns for -- in your report; right?

11:07:52 **15** **A.** Yes.

11:07:52 **16** **Q.** Okay. What is SAED?

11:07:53 **17** **A.** Selected area electron diffraction.

11:07:55 **18** **Q.** Can you just at a high level tell me how

11:07:58 **19** that works?

11:08:00 **20** **A.** Tell you how it works?

11:08:01 **21** **Q.** Yeah, just -- you know, you've got -- it's

11:08:03 **22** in the TEM, what do you do?

11:08:04 **23** **A.** Yep. We talked about it a little bit

11:08:07 **24** before. You essentially set the microscope up to

11:08:13 **25** isolate the beam on the area of interest, and then

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11:09:32 **1** done in one axis, pick it up and say I am sure that's

11:09:36 **2** an amphibole?

11:09:36 **3** **A.** Yeah, if you measure it out, if you do the

11:09:40 **4** verification, you know, you do the measurements on

11:09:42 **5** it, it will give you the lattice parameters of an

11:09:46 **6** amphibole of some type or, you know, maybe a

11:09:49 **7** serpentine of some type if it's chrysotile. And then

11:09:52 **8** you can go, yeah, this is a -- it possibly is at this

11:09:56 **9** point.

11:09:56 **10** **Q.** Okay. I'm not asking if it possibly is.

11:09:58 **11** I'm saying is there a one-axis diffraction pattern

11:10:01 **12** that is uniquely -- strike that.

11:10:07 **13** **A.** Yeah.

11:10:07 **14** **Q.** If I had a one-axis diffraction pattern

11:10:12 **15** for a phyllosilicate, there's no way you're going to

11:10:15 **16** confuse that with an amphibole?

11:10:17 **17** **A.** Probably not.

11:10:19 **18** **Q.** Why not?

11:10:20 **19** **A.** They're stacked layers versus what is in

11:10:28 **20** an amphibole where you have essentially -- I don't

11:10:34 **21** know how to describe it. They're like railroad iron,

11:10:41 **22** what do you call it, like railroad tracks. That's

11:10:44 **23** how they're stacked up in an amphibole; whereas in a

11:10:47 **24** phyllosilicate, you've got flat planes mostly.

11:10:50 **25** **Q.** Okay. If I were to hand you a one-axis

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11:08:17 **1** it's very much like -- the sample is much like a

11:08:23 **2** prism.

11:08:24 **3** You know how you hold a prism up in the

11:08:26 **4** light and it breaks it all up into colors. All

11:08:28 **5** right. So the reason that's happening is because the

11:08:30 **6** electrons or, in this case, the wavelength of light,

11:08:33 **7** is slowed so that you get the different colors.

11:08:38 **8** In this case, the electron beam goes

11:08:40 **9** through the specimen and it strikes the lattice

11:08:44 **10** planes. These are the planes that make up the

11:08:46 **11** crystal and they reflect off and they give you all of

11:08:48 **12** these spots, patterns. And they're specific for the

11:08:51 **13** kind of material that you're looking at.

11:08:52 **14** **Q.** Okay. Can you identify a particle as

11:08:55 **15** asbestos with SAED alone?

11:08:58 **16** MS. O'DELL: Object to the form.

11:08:59 **17** THE WITNESS: You can get to an

11:09:06 **18** understanding of whether this is an amphibole,

11:09:11 **19** and then from there you need the other

11:09:12 **20** information to help make the conclusion.

11:09:15 **21** **Q.** (By Mr. Chachkes) And can you understand

11:09:20 **22** if a particle is an amphibole based on an SAED

11:09:25 **23** with -- in isolation that's only done with one axis?

11:09:27 **24** **A.** Yes, you can could that.

11:09:29 **25** **Q.** Okay. So you can see an SAED that's only

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11:10:51 **1** SAED right now, you could tell me whether it was an

11:10:54 **2** amphibole versus a phyllosilicate?

11:10:56 **3** **A.** Probably. I don't know if I could tell

11:10:59 **4** you as I sit here right now, but, you know, based on

11:11:01 **5** the knowledge of the planes, measuring the crystal

11:11:08 **6** planes, it's a good possibility you could say, yeah,

11:11:10 **7** it's probably an amphibole.

11:11:11 **8** **Q.** Okay. Within a reasonable degree of

11:11:13 **9** scientific certainty?

11:11:13 **10** **A.** Yeah, I think you could say that, but

11:11:17 **11** you'd want more data on it to be able to call the

11:11:20 **12** class.

11:11:20 **13** **Q.** Did you do a comprehensive review of

11:11:23 **14** crystalline material to determine whether there are

11:11:28 **15** SAED patterns in one axis that look like amphiboles?

11:11:35 **16** MS. O'DELL: Object to the form.

11:11:36 **17** THE WITNESS: Well, I think the answer to

11:11:37 **18** that is there are a number of them, and

11:11:42 **19** depending upon the plane, the axis of the plane,

11:11:52 **20** you know, you've got to do the measurements on

11:11:54 **21** those.

11:11:54 **22** So the answer to that is there are a

11:11:57 **23** number of different planes; but in any one

11:12:00 **24** sitting, again, if you get a good diffraction

11:12:04 **25** pattern, you can still measure that pattern and

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11:12:08 **1** come up with whether it is an amphibole.
 11:12:10 **2 Q.** (By Mr. Chachkes) The original question
 11:12:12 **3** is whether you did a comprehensive review of minerals
 11:12:14 **4** other than amphiboles, other than serpentine, to
 11:12:17 **5** determine whether there are one-axis SAED diffraction
 11:12:21 **6** patterns that you can't without more axes determine
 11:12:25 **7** whether it's an amphibole or another class. Did you
 11:12:29 **8** do that?
 11:12:29 **9** MS. O'DELL: Object to -- excuse me.
 11:12:30 **10** MR. CHACHKES: Let me finish my question.
 11:12:31 **11 Q.** (By Mr. Chachkes) Did you do such a
 11:12:32 **12** comprehensive review?
 11:12:34 **13** MS. O'DELL: Objection to form. That
 11:12:35 **14** wasn't the previous question. Object to the
 11:12:37 **15** form.
 11:12:37 **16** THE WITNESS: Well, I didn't do a
 11:12:39 **17** comprehensive review.
 11:12:40 **18 Q.** (By Mr. Chachkes) Okay. Did anybody do a
 11:12:41 **19** comprehensive review?
 11:12:42 **20 A.** Well --
 11:12:45 **21** MS. O'DELL: Object to the form.
 11:12:46 **22** THE WITNESS: -- understand -- once again,
 11:12:48 **23** understand that there's a huge body of
 11:12:53 **24** literature and standard methodologies that are
 11:12:55 **25** used for identifying these classes of minerals.
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11:13:00 **1** It's well known.
 11:13:01 **2** You don't have to have -- I mean, you have
 11:13:04 **3** to have an awareness of that there that there
 11:13:07 **4** could be others, but focused in on these types
 11:13:10 **5** of minerals, you know, there's plenty of data to
 11:13:15 **6** be able to make a decision based on looking at
 11:13:18 **7** one plane.
 11:13:20 **8** For instance, chrysotile is a good
 11:13:22 **9** example. You can look at the diffraction
 11:13:24 **10** pattern and see that it's streaked and right
 11:13:27 **11** away know that I possibly have this kind of, you
 11:13:32 **12** know, asbestiform mineral, let me look at the
 11:13:36 **13** morphology, oh, it's rolled up like a scroll.
 11:13:39 **14** That's chrysotile. Oh, when I do the EDS, I've
 11:13:42 **15** got practically a 1-to-1 mag-silicon ratio.
 11:13:47 **16** Wow. You know, 99 percent sure that this is
 11:13:49 **17** chrysotile.
 11:13:49 **18 Q.** (By Mr. Chachkes) The original question
 11:13:51 **19** was did anybody at MAS --
 11:13:52 **20 A.** I answered that.
 11:13:53 **21 Q.** Okay. Let me ask --
 11:13:54 **22 A.** Not to cut you off --
 11:13:54 **23 Q.** You just did cut me off.
 11:13:54 **24 A.** -- but I already answered that.
 11:13:55 **25 Q.** Okay. Let me ask again.
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11:13:56 **1** Did anybody at -- it's a yes or no
 11:13:59 **2** question.
 11:13:59 **3** Did anybody at MAS do a comprehensive
 11:14:01 **4** review to determine what I've asked?
 11:14:05 **5** MS. O'DELL: Object --
 11:14:05 **6** THE WITNESS: You'd have to ask Bill
 11:14:07 **7** Longo.
 11:14:07 **8** MS. O'DELL: Excuse me.
 11:14:08 **9** THE WITNESS: You'd have to ask Dr. Longo.
 11:14:08 **10 Q.** (By Mr. Chachkes) Okay. Sitting here
 11:14:09 **11** today you don't know?
 11:14:09 **12** MS. O'DELL: Object to form.
 11:14:09 **13** THE WITNESS: He could give you that
 11:14:14 **14** answer.
 11:14:14 **15 Q.** (By Mr. Chachkes) Okay. What about
 11:14:14 **16** you --
 11:14:14 **17** THE REPORTER: Wait, wait. You're talking
 11:14:14 **18** at the same time.
 11:14:14 **19** THE WITNESS: Dr. Longo. Sorry.
 11:14:22 **20** Dr. Longo.
 11:14:22 **21 Q.** (By Mr. Chachkes) Okay. But you can't
 11:14:22 **22** give me the answer? I have to ask Dr. Longo?
 11:14:26 **23 A.** I don't know. That's my answer. Ask
 11:14:29 **24** Dr. Longo.
 11:14:29 **25 Q.** Is there a -- so there are SAED axes;
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1 correct?
 11:14:38 **2 A.** Yes.
 11:14:38 **3 Q.** And you can take an SAED image or pattern
 11:14:44 **4** on an axis or off an axis; right?
 11:14:47 **5 A.** Uh-huh, yes.
 11:14:47 **6 Q.** All right. Is there an off-axis single
 11:14:53 **7** SAED diffraction pattern that is signature-only
 11:14:57 **8** amphiboles?
 11:14:57 **9 A.** I would have to review that, but typically
 11:15:07 **10** the answer is if you get -- if you verify the
 11:15:15 **11** spacing, the atomic spacings, at the variance for
 11:15:19 **12** each one of the minerals, one of the -- you know,
 11:15:23 **13** asbestiform minerals -- you know, they're in a group,
 11:15:26 **14** there's a range for actually that spacing too, so --
 11:15:30 **15** but if you come within that spacing, then you most
 11:15:32 **16** likely have an amphibole.
 11:15:33 **17 Q.** I wasn't asking you about most likely.
 11:15:35 **18** I'm asking about conclusive, 100 percent, you know
 11:15:38 **19** that's an amphibole.
 11:15:39 **20** MS. O'DELL: Object to the form.
 11:15:40 **21** THE WITNESS: I just told you.
 11:15:41 **22 Q.** (By Mr. Chachkes) Okay. You used the
 11:15:44 **23** word most likely. Let me ask you a different way.
 11:15:47 **24 A.** What -- I try to answer -- you keep
 11:15:49 **25** breaking these technologies up that we're using to
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11:15:54 **1** verify this, which includes morphology, the shape and
 11:15:57 **2** form, which includes the chemistry, the EDS, and the
 11:16:01 **3** SAED required in the standard methods, all right.
 11:16:04 **4** These are the things. Each one of them by
 11:16:08 **5** themselves, no.
 11:16:09 **6** **Q.** Okay. I'm only asking questions. I'm not
 11:16:12 **7** telling you what your report is consisting of. I'm
 11:16:14 **8** not telling you anything. I'm just asking questions.
 11:16:16 **9** So if you could just focus on the question --
 11:16:19 **10** **A.** I'm trying to focus on it, but you keep
 11:16:21 **11** bringing up things that don't go together. All
 11:16:24 **12** right. They don't go together for the analysis.
 11:16:25 **13** **Q.** Okay. If I were to tell you that a career
 11:16:36 **14** academic mineralogist looked at one of your single
 11:16:40 **15** axis identifications of an asbestos and said that
 11:16:47 **16** SAED diffraction pattern can correspond to many
 11:16:52 **17** different minerals, would you have reason to dispute
 11:16:55 **18** that?
 11:16:55 **19** **A.** No.
 11:16:56 **20** **MS. O'DELL:** Object to the form.
 11:16:57 **21** **Q.** (By Mr. Chachkes) Okay. If I brought in
 11:16:58 **22** that same mineralogist who said this single axis
 11:17:02 **23** diffraction pattern that you have can correspond to
 11:17:07 **24** some nonamphibole minerals, do you have -- sitting
 11:17:11 **25** here today do you have a reason to dispute that?
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11:17:13 **1** **A.** Yes.
 11:17:14 **2** **Q.** Okay. What is that reason?
 11:17:14 **3** **A.** Well, I would have to see what the -- what
 11:17:18 **4** they were disputing. I'd have to see the data first.
 11:17:20 **5** And then I would like to know the qualifications of
 11:17:23 **6** this expert and I would like to see what their
 11:17:25 **7** quality control is in order to be able to say this
 11:17:29 **8** person -- especially in academia, because academia
 11:17:32 **9** most of the time doesn't have any kind of quality
 11:17:34 **10** control.
 11:17:34 **11** So I look a little bit less on their --
 11:17:40 **12** you know, they may have been a professor in this for
 11:17:42 **13** who knows how long. How long have they worked in the
 11:17:45 **14** laboratory? What's their quality control? What have
 11:17:48 **15** they done? This is what I want to know.
 11:17:50 **16** **Q.** Do you --
 11:17:51 **17** **A.** The analysts that we have -- so let me
 11:17:53 **18** answer the question.
 11:17:54 **19** The analysts we have essentially go
 11:17:57 **20** through a process where they are tested by NIST
 11:18:02 **21** NVLAP. Think are tested on a quarterly basis on
 11:18:05 **22** unknowns that NIST sends to us that we have to
 11:18:08 **23** identify, okay.
 11:18:10 **24** So what academic professor does that?
 11:18:13 **25** None that I know of.
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1 **Q.** Okay.
 11:18:14 **2** **A.** So you can bring up all the academic
 11:18:17 **3** professors, and I will dispute, you know, a lot of
 11:18:19 **4** what they do.
 11:18:20 **5** **Q.** Okay. If a supremely complicated --
 11:18:27 **6** strike that.
 11:18:27 **7** If a supremely qualified mineralogist and
 11:18:31 **8** SAED expert were to tell you that one of your single
 11:18:34 **9** axis diffraction patterns that you identified as
 11:18:37 **10** asbestos can correspond to a nonamphibole -- on a
 11:18:43 **11** theoretical basis based on the structure of the
 11:18:45 **12** nonamphibole, sitting here today, do you have a
 11:18:46 **13** reason to dispute that?
 11:18:47 **14** **MS. O'DELL:** Object to the form.
 11:18:49 **15** **THE WITNESS:** Yes.
 11:18:49 **16** **Q.** (By Mr. Chachkes) Okay. What is that?
 11:18:50 **17** **A.** I just told you. I'm not going to go
 11:18:51 **18** through the answer all over again.
 11:18:54 **19** **Q.** Okay. That was all practical. I'm now
 11:18:56 **20** talking about theoretical.
 11:18:56 **21** **A.** Same for that one, too. Same answer.
 11:18:57 **22** **Q.** SAED patterns correspond to the lattice of
 11:19:02 **23** a mineral; correct?
 11:19:03 **24** **A.** Correct.
 11:19:03 **25** **Q.** Is there a nonamphibole that has a lattice
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11:19:09 **1** that could possibly give you a single axis
 11:19:13 **2** diffraction pattern that looks like an amphibole?
 11:19:17 **3** **A.** I don't know the answer to that because
 11:19:20 **4** most of them are -- they have diffraction data for
 11:19:24 **5** all these minerals, and there will be slight
 11:19:27 **6** differences between them. So, you know, I would have
 11:19:29 **7** to look at the data.
 11:19:29 **8** **Q.** Okay. Can you identify -- okay, I think I
 11:19:33 **9** already asked -- did I already ask you if you can
 11:19:35 **10** identify a particle with SAED alone?
 11:19:35 **11** **A.** Yeah.
 11:19:36 **12** **Q.** Okay. I'm not going to --
 11:19:37 **13** **A.** Yep.
 11:19:38 **14** **Q.** -- again.
 11:19:39 **15** Did I ask whether you can distinguish
 11:19:41 **16** anthophyllite from talc --
 11:19:42 **17** **A.** Yes.
 11:19:42 **18** **Q.** -- SAED alone?
 11:19:43 **19** **A.** Yes.
 11:19:44 **20** **Q.** Okay. Sorry if I'm --
 11:19:46 **21** **A.** That's okay.
 11:19:46 **22** **Q.** Oh, I know where I am.
 11:19:48 **23** Can you distinguish anthophyllite from
 11:19:50 **24** cummingtonite with SAED alone?
 11:19:53 **25** **A.** Let's see. The answer to that is
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11:20:00 **1** possibly.
 11:20:02 **2 Q.** When you say possibly, can you be
 11:20:04 **3** specific?
 11:20:04 **4 A.** Again, you'd have to do -- you'd have to
 11:20:08 **5** do zone axis in a couple of different zones to tell,
 11:20:11 **6** and then you probably can say it's most likely. But
 11:20:14 **7** again, you'd want to do -- you'd want to do the EDS
 11:20:17 **8** and you'd, of course, look at the form of it, too.
 11:20:19 **9 Q.** So how many zone axes would you need if
 11:20:22 **10** you only had SAED to rely on to determine whether you
 11:20:25 **11** were looking at anthophyllite or cummingtonite?
 11:20:28 **12** MS. O'DELL: Object to the form.
 11:20:29 **13** THE WITNESS: You could do -- you could
 11:20:31 **14** use one. It depends on the pattern that you
 11:20:34 **15** see. If it was more of an orthorhombic pattern,
 11:20:39 **16** you know, most likely anthophyllite; if it was
 11:20:44 **17** more a monoclinic pattern, most likely
 11:20:45 **18** cummingtonite.
 11:20:45 **19 Q.** (By Mr. Chachkes) Okay. Let me just show
 11:20:45 **20** you what was marked yesterday as Exhibit 15.
 11:20:55 **21** Do you have 15? No. Here it is, I'm
 11:20:58 **22** sorry. Okay.
 11:21:01 **23** I'll represent to you what was -- what's
 11:21:05 **24** in Exhibit 15 is pulled from a textbook. Do you
 11:21:08 **25** recognize that as an SAED pattern in three axes?
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11:21:55 **1** measured that, when you measure out for each one of
 11:21:57 **2** the sets or wherever it would be, there are
 11:21:59 **3** parameters -- lattice parameters in each one of those
 11:22:03 **4** zones, and that would still be tremolite.
 11:22:04 **5 Q.** Okay. If --
 11:22:06 **6 A.** It would still be tremolite.
 11:22:07 **7 Q.** Okay.
 11:22:08 **8 A.** Okay.
 11:22:08 **9 Q.** Are you done?
 11:22:09 **10 A.** Yeah.
 11:22:09 **11 Q.** Okay. If you had an SAED pattern for a
 11:22:11 **12** mineral in three separate axes and each one was
 11:22:14 **13** exactly the same, could it possibly be tremolite?
 11:22:17 **14** MS. O'DELL: Object to the form.
 11:22:18 **15** THE WITNESS: I don't know.
 11:22:18 **16 Q.** (By Mr. Chachkes) Wouldn't that mean it
 11:22:20 **17** was a symmetric lattice and that tremolite doesn't
 11:22:24 **18** have a symmetric lattice?
 11:22:27 **19 A.** Again, I don't know how to answer that
 11:22:28 **20** question.
 11:22:29 **21 Q.** Are you aware of what the lattice of
 11:22:30 **22** tremolite looks like?
 11:22:31 **23 A.** Yes. I am. It is monoclinic.
 11:22:35 **24 Q.** Okay. Is it perfectly symmetrical in the
 11:22:38 **25** X, Y, and Z axes?
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11:21:10 **1 A.** Yes.
 11:21:11 **2 Q.** And is there any reason to believe this is
 11:21:12 **3** an incorrect three-axes SAED pattern for tremolite?
 11:21:16 **4** MS. O'DELL: Object to form.
 11:21:17 **5** THE WITNESS: I have no idea on that.
 11:21:18 **6** What was this published in; do you know?
 11:21:20 **7 Q.** (By Mr. Chachkes) It's not coming to my
 11:21:21 **8** mind right now but --
 11:21:22 **9 A.** I need to know that.
 11:21:22 **10 Q.** Okay.
 11:21:23 **11 A.** Yep. I can't make any decisions on that
 11:21:26 **12** unless I know the surrounding stuff here.
 11:21:27 **13 Q.** That's fine.
 11:21:28 **14 A.** Yeah.
 11:21:28 **15 Q.** Sitting here today, any reason to believe
 11:21:30 **16** this is incorrect?
 11:21:31 **17** MS. O'DELL: Object to the form.
 11:21:33 **18** THE WITNESS: Again --
 11:21:34 **19** MS. O'DELL: He's answered your question.
 11:21:36 **20** THE WITNESS: Yep. It's hard to tell
 11:21:38 **21** without, you know, knowing where this is from.
 11:21:42 **22 Q.** (By Mr. Chachkes) Okay. Is it your
 11:21:44 **23** understanding that tremolite can have different SAED
 11:21:48 **24** patterns in the three different axes?
 11:21:52 **25 A.** Again, it could. But once again, when you
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11:22:40 **1 A.** I don't know. I'd have to look at it.
 11:22:42 **2 Q.** Okay. We can take a break now, if you
 11:22:51 **3** like.
 11:22:51 **4 A.** Do you need a break?
 11:22:52 **5 Q.** Yeah.
 11:22:54 **6 A.** Sure.
 11:22:54 **7** (Recess from 11:22 a.m. to 11:42 a.m.)
 11:42:33 **8 Q.** (By Mr. Chachkes) Would you agree with
 11:42:52 **9** the statement that the more complete the SAED pattern
 11:42:56 **10** an analyst obtains, the more likely the analyst is to
 11:43:00 **11** make an accurate determination of the crystal
 11:43:02 **12** structure?
 11:43:03 **13 A.** I don't know what you mean by complete.
 11:43:08 **14** Aside from the definition of the SAED pattern,
 11:43:16 **15** sometimes they can be faint; they can be light. So
 11:43:21 **16** the more defined the pattern is, I would say that
 11:43:24 **17** helps.
 11:43:24 **18 Q.** Okay. When you say defined, you mean the
 11:43:26 **19** kind of the -- when you say faint and light, that's
 11:43:31 **20** just a matter of how dark the dot is?
 11:43:32 **21 A.** Yeah, well, the diffraction pattern
 11:43:34 **22** sometimes can be very -- it can be very faint, so,
 11:43:38 **23** you know, it just depends. So the more defined the
 11:43:43 **24** pattern is, the better.
 11:43:43 **25 Q.** What about the more focused the pattern,
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11:43:46 **1** the better?

11:43:47 **2** **A.** Again, the pattern is usually going to be

11:43:52 **3** focused properly -- when the microscope is set up

11:43:55 **4** properly, you're going to get a good defined pattern.

11:43:58 **5** So it's mainly the ability to see all the spots there

11:44:04 **6** associated with that particular zone.

11:44:06 **7** **Q.** If you get a SAED pattern where the dots

11:44:09 **8** are unfocused, can that hamper the ability to

11:44:14 **9** identify the crystal?

11:44:15 **10** MS. O'DELL: Object to the form.

11:44:16 **11** THE WITNESS: The answer to that is no.

11:44:18 **12** Sometimes we see patterns that are smeared or

11:44:21 **13** diffuse. Again, chrysotile is a good example of

11:44:23 **14** that.

11:44:24 **15** But if you see a very diffuse pattern,

11:44:28 **16** then you may have what's more like an amorphous,

11:44:31 **17** not a very crystalline material, and you'll see

11:44:34 **18** that in rings.

11:44:35 **19** **Q.** (By Mr. Chachkes) Are there instances

11:44:36 **20** where you are unable to obtain a clear SAED pattern

11:44:40 **21** so your data in that scenario is inconclusive?

11:44:44 **22** MS. O'DELL: Object to the form.

11:44:45 **23** THE WITNESS: You will work to get the

11:44:51 **24** best pattern that you can out of the structure

11:44:52 **25** that you have, so the answer to that is you

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11:46:12 **1** calculations on what the gold lattice parameters are,

11:46:17 **2** and then they will compare that to the unknown using

11:46:21 **3** that particular configuration.

11:46:23 **4** **Q.** Okay. Sometimes you say diffraction

11:46:27 **5** pattern, and just to be clear --

6 **A.** Sure.

11:46:29 **7** **Q.** -- diffraction pattern, you're being

11:46:32 **8** synonymous with SAED?

11:46:34 **9** **A.** Yes.

11:46:34 **10** **Q.** And how do your analysts determine when

11:46:38 **11** it's appropriate to take multiple axes for a single

11:46:42 **12** sample under SAED?

11:46:43 **13** **A.** That's a good question. Typically we'll

11:46:46 **14** do that for anthophyllite to verify that it is

11:46:50 **15** anthophyllite. We'll take multiples on that.

11:46:52 **16** It's not required in the standard method

11:46:55 **17** to do that because typically you can do it in one

11:46:58 **18** zone for the amphiboles. But to show that it's not

11:47:04 **19** fibrous talc versus anthophyllite, you're essentially

11:47:08 **20** going to take another one to verify it.

11:47:10 **21** **Q.** Okay. For tremolite, you take one axis?

11:47:12 **22** **A.** Yes, you can.

11:47:13 **23** **Q.** Okay. Not what -- I'm not asking about

11:47:15 **24** what you can do. So let me put it --

11:47:17 **25** **A.** Yes.

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11:44:54 **1** won't use a pattern that's not acceptable.

11:44:57 **2** **Q.** (By Mr. Chachkes) Right. The question

11:44:58 **3** isn't about -- so the question is -- let me ask a

11:45:01 **4** different question.

11:45:01 **5** **A.** Okay.

11:45:02 **6** **Q.** In doing the MDL samples, did you ever run

11:45:04 **7** across a case where you were unable to obtain a clear

11:45:09 **8** SAED pattern and so the SAED was inconclusive?

11:45:12 **9** MS. O'DELL: Object to the form.

11:45:13 **10** THE WITNESS: I don't know of any, no.

11:45:14 **11** **Q.** (By Mr. Chachkes) Analysts can use the

11:45:18 **12** information obtained from SAED to make distinctions

11:45:22 **13** in the crystal system of the lattice, for example,

11:45:27 **14** whether it's triclinic, monoclinic, cubic, or

11:45:30 **15** orthorhombic?

11:45:33 **16** **A.** Yes.

11:45:33 **17** **Q.** Okay. Sorry.

11:45:37 **18** **A.** I paused.

11:45:38 **19** **Q.** Yes.

11:45:50 **20** Describe how you or your analysts

11:45:53 **21** calibrate the SAED apparatus.

11:45:56 **22** **A.** The electron diffraction? Again, I'm not

11:45:59 **23** an expert in that particular area, but what they

11:46:02 **24** typically do is they'll do a sizing based on gold, a

11:46:08 **25** film of gold, and from that they will make

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1 **Q.** Okay.

11:47:18 **2** **A.** The answer's yes.

11:47:19 **3** **Q.** Okay. There are no SAED patterns that you

11:47:23 **4** created for the MDL samples that weren't produced;

5 correct?

11:47:25 **6** **A.** Correct.

11:47:26 **7** **Q.** And I'm seeing one SAED pattern for the

11:47:29 **8** tremolite, meaning can I conclude that you've only

11:47:32 **9** taken one SAED pattern for the tremolites?

11:47:34 **10** **A.** I would say yes to that.

11:47:35 **11** **Q.** Okay. And I'm seeing two SAED patterns

11:47:39 **12** for anthophyllite. Is it okay for me to conclude

11:47:41 **13** that you take only two patterns for anthophyllite?

11:47:45 **14** **A.** Most likely yes, because again, we want to

11:47:48 **15** be able to distinguish that from fibrous talc.

11:47:52 **16** **Q.** Let's look at another exhibit. What

11:48:00 **17** number is that? Is that like 16? Let's look at 16.

11:48:08 **18** **A.** Okay.

11:48:08 **19** **Q.** Do you recognize what's been marked as

11:48:10 **20** Longo Exhibit 16?

11:48:13 **21** **A.** Yes.

11:48:13 **22** **Q.** What's a diffraction verification?

11:48:17 **23** **A.** These are diffractions that have been done

11:48:21 **24** on a sample that's already been analyzed, and what

11:48:24 **25** the analyst does is they go back in and they verify

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11:48:27 **1** the diffraction pattern. They verify that it is, in
 11:48:31 **2** fact, whatever it was called before.
 11:48:33 **3** **Q.** Yeah, I see that -- do you see the date
 11:48:37 **4** verified down there in the lower left?
 11:48:39 **5** **A.** Which one are we looking at? Page 1?
 11:48:40 **6** **Q.** Let's look at the first page of that --
7 **A.** Okay.
 11:48:42 **8** **Q.** -- that you actually see a verification.
 11:48:44 **9** Most if not all of the verifications are after the
 11:48:47 **10** date of your first report; is that correct?
 11:48:51 **11** MS. O'DELL: At least on this page?
12 THE WITNESS: Yeah.
 11:48:53 **13** MR. CHACHKES: Well, it's a question.
 11:48:54 **14** THE WITNESS: I would think -- what's the
 11:48:55 **15** question again?
 11:48:56 **16** **Q.** (By Mr. Chachkes) The question is were
 11:48:56 **17** most if not all of your verifications for the MDL
 11:48:59 **18** samples done after the date of your first report,
 11:49:02 **19** which was October 14?
 11:49:03 **20** **A.** I don't know. I'd have to look at these
 11:49:05 **21** and compare that to that date.
 11:49:06 **22** **Q.** Okay. This verification, for example, was
 11:49:13 **23** done after the date of your first report; correct?
 11:49:16 **24** **A.** Yes.
 11:49:16 **25** **Q.** Okay. And you're --
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11:50:18 **1** 4.94 to 5.46. So within that range, if your spacing
 11:50:23 **2** falls within that range, it could be grunerite.
 11:50:28 **3** **Q.** Now, for this verification page, you
 11:50:34 **4** calculated a d-spacing of 5.23; correct?
 11:50:38 **5** **A.** Correct.
 11:50:38 **6** **Q.** And that falls within the range of every
 11:50:40 **7** single amphibole on that list; right?
 11:50:43 **8** **A.** Correct.
 11:50:43 **9** **Q.** How was it that this verifies that this is
 11:50:46 **10** anthophyllite when it falls within the range of every
 11:50:48 **11** amphibole in your list?
 11:50:49 **12** **A.** Well, again, this is not -- this is an
 11:50:52 **13** incomplete. We have to look at the EDS, and we also
 11:50:56 **14** have to look at the form again. So with that
 11:50:59 **15** standard methodology, then we can come to a
 11:51:02 **16** conclusion that it is anthophyllite.
 11:51:03 **17** So it's not done in a vacuum, if you will.
 11:51:05 **18** The only thing that's done in a vacuum is putting the
 11:51:08 **19** sample into the electron microscope.
 11:51:10 **20** But that is true, and you will see that
 11:51:13 **21** for these lattice parameters.
 11:51:18 **22** **Q.** Okay. For this sample that we're looking
 11:51:22 **23** at, the d-spacing indeed corresponds to grunerite,
 11:51:24 **24** actinolite, tremolite, crocidolite, and
 11:51:27 **25** anthophyllite; correct?
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11:49:18 **1** **A.** Are you talking about the November report?
 11:49:19 **2** **Q.** November 14 --
 11:49:20 **3** **A.** Yes.
 11:49:20 **4** **Q.** -- I'm saying that's the first report.
 11:49:21 **5** **A.** Sure.
 11:49:22 **6** **Q.** So at the very least, you had already
 11:49:25 **7** determined by October 14 that this sample on the
 11:49:29 **8** first page corresponded to anthophyllite before you
 11:49:37 **9** had done the verification; correct?
 11:49:44 **10** **A.** Well, the answer to that is yes, we
 11:49:46 **11** already had determined it was anthophyllite.
 11:49:47 **12** **Q.** Okay. And so the verification's, what,
 11:49:49 **13** kind of a belt and suspenders?
 11:49:51 **14** **A.** Sure.
 11:49:51 **15** MS. O'DELL: Object to the form.
 11:49:52 **16** THE WITNESS: Well, I mean, it's a
 11:49:54 **17** follow-up.
 11:49:54 **18** **Q.** (By Mr. Chachkes) Okay. And I see that
 11:49:58 **19** there's a range in the table of amphibole types up
 11:50:02 **20** there at the top; do you see that?
 11:50:04 **21** **A.** Yes.
 11:50:04 **22** **Q.** What does the range column mean?
 11:50:07 **23** **A.** That is the actual atomic spacing for that
 11:50:11 **24** lattice parameter. And, for instance, if you take
 11:50:15 **25** grunerite at the beginning there, you'll see it's
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11:51:27 **1** MS. O'DELL: Object to the form.
 11:51:28 **2** THE WITNESS: Well, I mean, it's within
 11:51:29 **3** the range there. Again, this is why you can't
 11:51:32 **4** just use the one method to say, oh, I'm going to
 11:51:35 **5** use SAED and say that it is anthophyllite.
 11:51:38 **6** You've got to go look at the form of it;
 11:51:40 **7** you've got to go do the EDS to prove that it is.
 11:51:44 **8** So yeah.
 11:51:47 **9** **Q.** (By Mr. Chachkes) Yeah, you would not use
 11:51:48 **10** EDS d-spacing alone to determine the mineral you're
 11:51:53 **11** looking at because it falls under too many different
 11:51:55 **12** minerals; correct?
 11:51:55 **13** MS. O'DELL: Object to the form.
 11:51:56 **14** THE WITNESS: It tells you that it is an
 11:51:58 **15** amphibole, that it is in that range. And again,
 11:52:00 **16** we do -- let's see. There should be another one
 11:52:03 **17** here of the same one. Let's see.
 11:52:10 **18** Number 301 01. If you go to the next
 11:52:12 **19** page, you'll see this is the same structure
 11:52:14 **20** again, same structure again, the second
 11:52:17 **21** verification. Down here you'll see the zone, it
 11:52:20 **22** was a 101, and the d-spacing for that zone are
 11:52:25 **23** shown there for each one of the angles -- you
 11:52:27 **24** know, each one of the lattice parameters, and
 11:52:30 **25** this verifies it as anthophyllite if you were
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11:52:34 **1** looking at the table, the spacing table. So
 11:52:37 **2** then we look at the EDS, the EDS confirms again
 11:52:40 **3** the chemistry. So, you know, it's dead to right
 11:52:45 **4** anthophyllite.
 11:52:46 **5** **Q.** (By Mr. Chachkes) So you're just looking
 11:52:47 **6** at -- so I see the spacing here is 21.2?
 11:52:50 **7** **A.** Right. Now that's in -- this zone is 101
 11:52:54 **8** zone.
 11:52:55 **9** **Q.** Okay.
 11:52:56 **10** **A.** Okay. That is what it would be in the 101
 11:52:58 **11** zone.
 11:52:58 **12** **Q.** And you don't have ranges for the 101
 11:53:01 **13** zone, do you?
 11:53:02 **14** **A.** Well, there are tables for the ranges in
 11:53:03 **15** the 101 zone. We don't have one right here --
 11:53:03 **16** **Q.** Okay.
 11:53:07 **17** **A.** -- but there are table ranges for that.
 11:53:09 **18** **Q.** When you say -- so for this table on the
 11:53:12 **19** second page of -- the second verification, are you
 11:53:16 **20** looking at the 5.05 down at the bottom?
 11:53:19 **21** **A.** Yes.
 11:53:19 **22** **Q.** Okay. That 5.05 falls within every single
 11:53:23 **23** amphibole type in your table as well?
 11:53:26 **24** **A.** No, no. It's a combination of the HKO,
 11:53:29 **25** the HKL, the zone that you're in what the angle is.
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11:54:47 **1** of 21.2 in that range?
 11:54:49 **2** **A.** I can't tell you that as I sit here.
 11:54:51 **3** **Q.** Okay. Does the verification -- have you
 11:55:04 **4** ever done a verification and the spacing fell outside
 11:55:07 **5** the range of what you had already identified?
 11:55:09 **6** **A.** I don't know the answer to that.
 11:55:10 **7** **Q.** Did that happen for the MDL at all? You
 11:55:13 **8** just don't know?
 11:55:14 **9** **A.** I don't know.
 11:55:14 **10** MS. O'DELL: Object to the form.
 11:55:15 **11** THE WITNESS: Yeah, I don't know.
 11:55:16 **12** **Q.** (By Mr. Chachkes) If it happened, you
 11:55:18 **13** would have reported it; right?
 11:55:19 **14** **A.** Well, yes. I would think so, yes.
 11:55:21 **15** **Q.** Did you do any of these d-spacing
 11:55:30 **16** verifications prior to the first draft, the
 11:55:33 **17** November 14 version of your report?
 11:55:35 **18** **A.** I --
 11:55:36 **19** MS. O'DELL: Feel free to look through it
 11:55:37 **20** if you need to. Look at the dates.
 11:55:39 **21** THE WITNESS: Let's see what we've got
 11:55:40 **22** here. Yeah, it looks like a few. Some of them
 11:55:47 **23** were here. Get towards the back. They were
 11:55:49 **24** done in October.
 11:55:52 **25** It looks like about half of them; half of
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11:53:32 **1** There are tables for these. You know what I'm
 11:53:35 **2** saying? We had talked about that a little bit
 11:53:37 **3** before. There are tables for these. And in each one
 11:53:41 **4** of the zones there are spacings, spacing tables, and
 11:53:45 **5** these fit in the anthophyllite zone.
 11:53:48 **6** **Q.** When you say these, do you mean the 101
 11:53:51 **7** spacing of 21.2?
 11:53:52 **8** **A.** Well, yes.
 11:53:53 **9** **Q.** Okay. And that table's not reproduced in
 11:53:55 **10** this page; correct?
 11:53:56 **11** **A.** No, it's not here.
 11:53:57 **12** **Q.** So in the peer-reviewed literature I would
 11:53:59 **13** find that a 101 zone spacing of 21.2 will correspond
 11:54:09 **14** uniquely to anthophyllite?
 11:54:09 **15** **A.** The answer to that is yes.
 11:54:11 **16** **Q.** Okay. Can you tell me what peer-reviewed
 11:54:13 **17** literature?
 11:54:13 **18** **A.** Let's see. There's a large body of card
 11:54:19 **19** data, diffraction card data, and again, there are
 11:54:22 **20** zone tables in that data, and that's where it comes
 11:54:25 **21** from. That's why we do the -- that's why we do the
 11:54:29 **22** double verification on anthophyllite, you know,
 11:54:30 **23** because it doesn't fit with talc.
 11:54:33 **24** **Q.** Can you tell me conclusively whether there
 11:54:38 **25** are other minerals that in the zone 101 have spacing
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11:55:54 **1** them were done before that first report.
 11:55:56 **2** **Q.** (By Mr. Chachkes) Can I conclude because
 11:56:00 **3** some were done after and some were done before the
 11:56:02 **4** first report, it wasn't material to your findings in
 11:56:05 **5** the first report?
 11:56:07 **6** MS. O'DELL: Object to the form.
 11:56:10 **7** THE WITNESS: Are you saying the ones that
 11:56:12 **8** are after that are not material? What's the
 11:56:14 **9** question?
 11:56:15 **10** **Q.** (By Mr. Chachkes) No.
 11:56:15 **11** So clearly before -- at the time of your
 11:56:18 **12** first report there were MDL samples on which you had
 11:56:23 **13** not done a d-spacing verification; correct?
 11:56:25 **14** **A.** No, we did the verification. I mean, we
 11:56:28 **15** did -- I mean, you have to understand it was called
 11:56:31 **16** at the time based on the data that we had for that
 11:56:38 **17** pattern, that chemistry, that morphology.
 11:56:40 **18** So again, I would say that they all have
 11:56:46 **19** been verified prior to that.
 11:56:47 **20** **Q.** Okay. So I want to make sure we're clear
 11:56:50 **21** here.
 11:56:50 **22** **A.** Sure.
 11:56:51 **23** **Q.** So going back to the first verification, I
 11:56:54 **24** see -- it says date verified November 19; correct?
 11:56:57 **25** **A.** Yes.
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11:56:57 **1** Q. You're saying there was another
 11:56:59 **2** verification prior to November 14?
 11:57:01 **3** A. Sure.
4 Q. And you did --
 11:57:01 **5** A. The actual analysis, when it was actually
 11:57:03 **6** done.
 11:57:03 **7** MR. CHACHKES: Okay. So we would actually
 11:57:06 **8** request that that other data be produced.
 11:57:08 **9** MS. O'DELL: It's been produced.
 11:57:09 **10** THE WITNESS: You already have it. It's
 11:57:10 **11** all in the reports.
 11:57:11 **12** Q. (By Mr. Chachkes) Okay.
 11:57:12 **13** A. Yeah.
 11:57:12 **14** Q. So was there a -- why did you redo it on
 11:57:16 **15** 11/19?
 11:57:17 **16** A. It's just part of our quality control. We
 11:57:20 **17** eventually have to do it as part of quality.
 11:57:22 **18** Q. So every single d-spacing that you did,
 11:57:25 **19** you did twice?
 11:57:26 **20** A. If it was anthophyllite, yeah.
 11:57:28 **21** Q. Okay. So the tremolites were all done --
 11:57:34 **22** so let me just -- I'm looking at a page for tremolite
 11:57:37 **23** where the verification is 11/19.
 11:57:41 **24** A. Okay. I mean, we've got anthophyllites
 11:57:45 **25** that were double-verified before that report also
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11:58:22 **1** A. That was a tremolite, yes.
 11:58:23 **2** Q. And it was verified after the date of the
 11:58:25 **3** first report; correct?
 11:58:26 **4** A. 11/19/2018. What is the date of the first
 11:58:31 **5** report?
 11:58:33 **6** MS. O'DELL: 11/14.
 11:58:33 **7** Q. (By Mr. Chachkes) 11/14.
 11:58:34 **8** A. 14. Okay. Yeah.
 11:58:34 **9** Q. So that was verified after the date of the
 11:58:37 **10** first report; correct?
 11:58:38 **11** A. Uh-huh.
 11:58:38 **12** Q. That means that as of the date of the
 11:58:40 **13** first report it had not been verified?
 11:58:41 **14** MS. O'DELL: Objection to form.
 11:58:43 **15** MS. PARFITT: Objection.
 11:58:44 **16** THE WITNESS: Well, let's back up just a
 11:58:45 **17** second. The actual date of the photo, okay, the
 11:58:48 **18** diffraction photo, was 10/26/2018, okay. So it
 11:58:52 **19** actually was done before that.
 11:58:54 **20** Q. (By Mr. Chachkes) The photo was taken --
 11:58:55 **21** A. The photo was taken, okay, and that's the
 11:58:58 **22** data. The photo is the data. So regardless of this
 11:59:02 **23** right here, all right, that is the pattern, and
 11:59:06 **24** that's what it was.
 11:59:10 **25** Q. You know what I'm talking about; right?
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11:57:48 **1** that was on 10/31/2018.
 11:57:51 **2** Q. Right.
 11:57:51 **3** A. There are a number of them here in the
 11:57:53 **4** report.
 11:57:53 **5** Q. So --
 11:57:54 **6** A. Numerous.
 11:57:55 **7** Q. You're saying some of the tremolites were
 11:57:57 **8** double-verified?
 11:57:58 **9** MS. O'DELL: Object to the form.
 11:57:59 **10** THE WITNESS: No, I don't think the
 11:58:00 **11** tremolites were. The anthophyllites are.
 11:58:03 **12** Q. (By Mr. Chachkes) Okay.
13 A. Yes.
 11:58:03 **14** Q. I can show you. I just don't have the
 11:58:04 **15** page numbers.
 11:58:05 **16** A. Okay.
 11:58:05 **17** Q. If you look at that one --
18 A. All right.
 11:58:07 **19** Q. -- in the exhibit --
 11:58:09 **20** MS. O'DELL: So let's be clear on the
 11:58:10 **21** record. Is there a sample number --
22 Q. (By Mr. Chachkes) You say the sample
 11:58:12 **23** number. What's the sample number for that one?
 11:58:13 **24** A. M68503-020-002.
 11:58:20 **25** Q. And that was the tremolite; correct?
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1 A. Yeah, I know what you mean.
2 Q. The actual --
3 A. I get that.
 11:59:13 **4** MS. O'DELL: Let him finish.
 11:59:13 **5** Q. (By Mr. Chachkes) Let me just finish.
6 A. Okay.
 11:59:14 **7** Q. Taking the photo and turning it into
 11:59:16 **8** useful data in a verification that gives you
 11:59:17 **9** d-spacing, you didn't do that until after the report?
 11:59:19 **10** MS. O'DELL: Object to form.
 11:59:20 **11** THE WITNESS: Well, again, I would have to
 11:59:21 **12** consult with the laboratory to see, you know,
 11:59:25 **13** what actually was done here. But the data
 11:59:27 **14** existed before the report was done.
 11:59:28 **15** Q. (By Mr. Chachkes) That's not my question.
 11:59:29 **16** A. I understand that. But understand that it
 11:59:33 **17** was already verified prior to that or wouldn't have
 11:59:35 **18** ended up in the report as tremolite.
 11:59:37 **19** Q. Was it verified with d-spacing prior to
 11:59:39 **20** the report at 11/14?
 11:59:41 **21** A. I would have to check on that, but to my
 11:59:43 **22** knowledge, it would be, yeah.
 11:59:44 **23** Q. Okay. So this would be a second d-spacing
 11:59:47 **24** calculation that you did for the tremolite?
 11:59:49 **25** MS. O'DELL: Object to the form.
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11:59:50 **1** THE WITNESS: Yes.
 11:59:50 **2 Q.** (By Mr. Chachkes) Okay.
 11:59:52 **3 A.** Yes.
 11:59:52 **4 Q.** When you did the first one -- strike that.
 11:59:58 **5 A.** Okay.
 11:59:58 **6 Q.** D-spacing's important to determining
 12:00:03 **7** whether you're accurately identifying a mineral using
 12:00:08 **8** diffraction patterns?
 12:00:11 **9** MS. O'DELL: Objection to form.
 12:00:12 **10** THE WITNESS: It's part of the standard
 12:00:13 **11** methodology.
 12:00:14 **12 Q.** (By Mr. Chachkes) Is it an important
 12:00:15 **13** part?
 12:00:15 **14** MS. O'DELL: Objection to form.
 12:00:16 **15** THE WITNESS: Well, I would think that if
 12:00:17 **16** you wanted the answer that, again, is it part of
 12:00:22 **17** the methodology, a lot of standards use that, so
 12:00:25 **18** yes.
 12:00:26 **19 Q.** (By Mr. Chachkes) Okay. Your methodology
 12:00:29 **20** of -- that you've described today for how you did
 12:00:33 **21** SAED -- strike that.
 12:00:37 **22 A.** Good.
 12:00:37 **23 Q.** Let's look at a specific section from your
 12:00:44 **24** report. And so you -- yes.
 12:00:53 **25** This is sample M68503-208 -- go slow
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12:02:05 **1** MS. O'DELL: And it's M68503-028?
 12:02:10 **2** MR. CHACHKES: -028, correct.
 12:02:17 **3** THE WITNESS: What's the decade?
 12:02:19 **4 Q.** (By Mr. Chachkes) I'm told the '70s.
 12:02:38 **5 A.** Let's see what it says here -- 03 --
6 MS. O'DELL: Is that it?
 12:02:39 **7** THE WITNESS: Should be section 8 -- you
 12:02:41 **8** said 028? It should be section -- well, it's
 12:02:44 **9** section 8 in ours. I'm not sure what it is in
 12:02:47 **10** here.
 12:02:50 **11** MS. O'DELL: Here we go.
 12:02:51 **12** THE WITNESS: Section 8. Okay. There we
 12:03:07 **13** go.
 12:03:08 **14 Q.** (By Mr. Chachkes) Okay. Are you there?
 12:03:11 **15 A.** Yes.
 12:03:11 **16 Q.** Okay. So it's anthophyllite, so you would
 12:03:13 **17** expect two diffraction patterns; correct? Can you
 12:03:19 **18** see two diffraction patterns?
 12:03:21 **19 A.** In this, there may be just one here.
 12:03:24 **20** There may be two on the verification, but let's see
 12:03:26 **21** if there is. Let's see.
 12:03:31 **22** 41391. Yes. There's two of them.
 12:03:32 **23 Q.** Why did you say there may be just one?
 12:03:34 **24 A.** Oh, well, I was thinking the -- I was
 12:03:37 **25** thinking anything else but anthophyllite. But
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 12:01:00 **1** here -- -028. Sorry. It's page 585 of the version
 12:01:07 **2** of the January 15 report that was produced to us.
 12:01:12 **3** And plaintiffs' counsel --
 12:01:13 **4** MS. O'DELL: I didn't catch that number.
 12:01:15 **5** Excuse me. What was it?
 12:01:16 **6** MR. CHACHKES: It was M68503-028.
 12:01:23 **7** MS. O'DELL: What's the page of the
 12:01:27 **8** report?
 12:01:27 **9** MR. CHACHKES: 585 of the version produced
 12:01:27 **10** to us. And you brought us versions separated by
 12:01:27 **11** decades, so you can find it in the 1970s
 12:01:30 **12** notebook. Okay.
 12:01:36 **13 Q.** (By Mr. Chachkes) And let's mark this as
 12:01:38 **14** a separate exhibit just so you can have it in front
 12:01:40 **15** of you without a huge binder.
 12:01:40 **16** MS. O'DELL: It's --
 12:01:44 **17** MR. CHACHKES: You want to do it in the
 12:01:46 **18** binder? That's fine. If you can locate it, I
 12:01:50 **19** don't care.
 12:01:50 **20** MS. O'DELL: I just don't want -- if he
 12:01:51 **21** needs to look at any other data, I want it to be
 12:01:54 **22** available to him. You're welcome to hand him
 12:01:55 **23** the exhibit, but I want to find it as well.
 12:01:56 **24** MR. CHACHKES: If you're going to find it,
 12:01:57 **25** it's just easy enough to do it that way.
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 12:03:40 **1** they're both here.
 12:03:41 **2 Q.** So for anthophyllite you always expect two
 12:03:43 **3** patterns in your report; correct?
 12:03:45 **4 A.** There should be, yes.
 12:03:45 **5 Q.** Okay. Now, looking at these diffraction
 12:03:49 **6** patterns, is there -- for this single sample that
 12:03:54 **7** we're looking at, can you use just those diffraction
 12:03:58 **8** patterns to tell whether or not it's cummingtonite as
 12:04:05 **9** an option?
 12:04:06 **10** MS. O'DELL: Object to the form.
 12:04:21 **11** THE WITNESS: What's the question again?
 12:04:23 **12 Q.** (By Mr. Chachkes) So can you tell from
 12:04:25 **13** the two diffraction patterns that you have for sample
 12:04:28 **14** M68503-028 whether this is anthophyllite versus
 12:04:35 **15** cummingtonite, just focusing on the diffraction
 12:04:37 **16** patterns?
 12:04:38 **17 A.** No.
 12:04:38 **18 Q.** And why not?
 12:04:39 **19 A.** Well, they can have a similar diffraction
 12:04:42 **20** pattern if this looks like -- this looks like an
 12:04:47 **21** orthorhombic pattern, just looking at it. So the
 12:04:54 **22** cummingtonite is going to have more of a monoclinic
 12:04:56 **23** pattern.
 12:04:56 **24 Q.** But you answered no. Why did you answer
 12:04:58 **25** no?
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12:05:00 **1** A. What --
 12:05:01 **2** Q. You said no to my question.
 12:05:02 **3** A. What was the question again?
 12:05:06 **4** Q. Can you tell whether -- from just the EDS
 12:05:07 **5** patterns whether this is cummingtonite or
 12:05:07 **6** anthophyllite?
 12:05:07 **7** A. Well, again, the answer is still no.
 12:05:16 **8** Q. I'm sorry, let me ask the question again
 12:05:18 **9** because I'm told by my associate that I misspoke.
 12:05:23 **10** Can you tell from the diffraction patterns
 12:05:28 **11** alone for sample M68503-028 whether this is
 12:05:37 **12** anthophyllite or cummingtonite?
 12:05:39 **13** A. I think I just answered that twice.
 12:05:41 **14** Q. Okay. And the answer was no?
 12:05:42 **15** A. Yeah. I mean, it appears to be an
 12:05:44 **16** orthorhombic pattern.
 12:05:47 **17** Q. Okay. What is the definition of
 12:05:53 **18** asbestiform?
 12:05:54 **19** A. Well, it actually means asbestos-like,
 12:05:59 **20** that's what the word means, like asbestos.
 12:06:01 **21** Q. So what is asbestos?
 12:06:03 **22** A. Well, the classic definition of
 12:06:09 **23** asbestiform would be a structure that is 1/2 a micron
 12:06:13 **24** in size with substantially parallel sides. Some
 12:06:18 **25** literature adds the stipulations of tensile strength
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12:06:24 **1** and all of that kind of thing, and most of them,
 12:06:27 **2** those definitions, are sort of on a geological macro
 12:06:31 **3** scale. That's what they're meant to describe.
 12:06:33 **4** Q. Okay. For your purposes, when you use the
 12:06:35 **5** word asbestos or asbestiform in your report, you're
 12:06:38 **6** saying -- are you saying anything more than 1/2 a
 12:06:42 **7** micron in size, substantially parallel sides?
 12:06:45 **8** A. Yes. I mean, it's a regulated definition.
 12:06:51 **9** Q. Yeah, but what I'm asking is if -- is
 12:06:54 **10** there any other qualification in your definition when
 12:06:57 **11** you use the phrase -- the words asbestiform or
 12:07:00 **12** asbestos in your report?
 12:07:01 **13** A. Well, we're going by the -- again, by the
 12:07:04 **14** classic definition of what I just described. Then
 12:07:09 **15** you go in and you do the diffraction, the EDS, and
 12:07:13 **16** the form of it of course -- you know, and then you
 12:07:16 **17** make a decision on that. But as far as, you know,
 12:07:18 **18** using that term, you know, it's mainly based on that
 12:07:22 **19** definition.
 12:07:23 **20** Q. Substantially parallel sides, 1/2 a
 12:07:26 **21** micron?
 12:07:26 **22** A. 1/2 a micron, yeah, yeah.
 12:07:29 **23** Q. Okay. What about aspect ratio, is that
 12:07:30 **24** part of your definition?
 12:07:31 **25** A. Well, again, it depends on the -- some of
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12:07:36 **1** the standards that you look at, the aspect ratio
 12:07:41 **2** is -- if you're talking OSHA, the aspect ratio is
 12:07:44 **3** 3-to-1. If you're talking AHERA, EPA, the aspect
 12:07:48 **4** ratio is 5-to-1. If you're talking ISO, the ratio is
 12:07:53 **5** 5-to-1. If you're talking ASTM, the ratio is 5-to-1.
 12:07:57 **6** So we go by 5-to-1, yeah.
 12:07:59 **7** Q. Am I correct in concluding that every time
 12:08:04 **8** in your expert report you use the word asbestos or
 12:08:06 **9** asbestiform, you're -- among the other qualifications
 12:08:11 **10** you said it's got at least a 5-to-1 ratio?
 12:08:13 **11** A. It should, yes.
 12:08:14 **12** Q. Okay. What about at least a 3-to-1 ratio?
 12:08:16 **13** A. And again, that's an OSHA. We're looking
 12:08:20 **14** at 5-to-1. OSHA will call it at that. They will
 12:08:25 **15** call it asbestos at that ratio.
 12:08:29 **16** So but in all of our reporting we're at
 12:08:33 **17** 5-to-1. So we do see 3-to-1 structures, and as far
 12:08:39 **18** as the body's concerned, it's going to treat the
 12:08:41 **19** 3-to-1 to 5-to-1 probably in the same manner. So
 12:08:46 **20** I've always testified that way. The structures that
 12:08:49 **21** it encounters, regardless of the aspect ratio, have
 12:08:53 **22** to be dealt with in the body.
 12:08:54 **23** Q. For the purposes of your report, did you
 12:08:56 **24** count a 3-to-1 as a fiber, an asbestos fiber?
 12:08:59 **25** A. Not that I'm aware of.
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12:09:02 **1** Q. Okay. Let me show you some testimony from
 12:09:06 **2** Dr. Longo from -- oh. Well, no, let's do this.
 12:09:17 **3** Can we mark this as the next exhibit.
 12:09:37 **4** (Defendants' Exhibit 2 was marked for
 12:09:37 **5** identification.)
 12:09:37 **6** Q. (By Mr. Chachkes) Okay. Can you turn to
 12:09:44 **7** page 3021. This is the deposition -- this is an
 12:09:51 **8** examination of Dr. Longo under oath.
 12:09:55 **9** Can you turn to page 3021? It's the very
 12:09:59 **10** last sheet. I'm going to read you a question and
 12:10:01 **11** answer. You can following along. It starts at
 12:10:04 **12** line 4.
 12:10:05 **13** Line 4, My question to you, Dr. Longo, is
 12:10:07 **14** that transmission electron microscopy cannot tell you
 12:10:11 **15** if you identify a single fiber whether or not that
 12:10:14 **16** particle is asbestiform or nonasbestiform; correct?
 12:10:18 **17** Answer: That is correct.
 12:10:21 **18** Do you agree with that testimony?
 12:10:24 **19** MS. O'DELL: Object to the form.
 12:10:25 **20** THE WITNESS: I don't -- I haven't read
 12:10:27 **21** this, so I don't know what preceded the question
 12:10:30 **22** there. I see what it says. So I don't have an
 12:10:35 **23** opinion on that.
 12:10:35 **24** Q. (By Mr. Chachkes) Okay. Putting aside
 12:10:38 **25** the transcript, I'm just going to ask you the
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12:10:40 **1** question independent of whatever this means in the
12:10:42 **2** transcript.
12:10:44 **3** Do you, Dr. Rigler, believe that
12:10:49 **4** transmission electron microscopy cannot tell you if
12:10:51 **5** you identify a single fiber whether or not that
12:10:54 **6** particle is asbestiform or nonasbestiform?
12:10:56 **7** MS. O'DELL: Object to form.
12:10:58 **8** THE WITNESS: Again, if they're including
12:11:05 **9** things like tensile strength, flexibility, that
12:11:09 **10** type of thing, you can't do that by TEM. So as
12:11:15 **11** far as the form goes, like asbestos, having a
12:11:18 **12** form of asbestos which is fibrous, the
12:11:21 **13** description of it, you definitely can.
12:11:23 **14** So but again, I don't know what the
12:11:25 **15** context of this is, so, you know, I don't have
12:11:30 **16** an opinion on that in reference to this.
12:11:32 **17** Q. (By Mr. Chachkes) Okay. Have you ever
12:11:33 **18** known Dr. Longo to use a geologic definition of
12:11:37 **19** asbestos?
12:11:37 **20** A. No.
12:11:38 **21** Q. Okay. And so when he testified that a TEM
12:11:42 **22** cannot tell you if you identify a single fiber
12:11:45 **23** whether or not that particle is asbestiform or
12:11:47 **24** nonasbestiform, you understand that to mean his
12:11:50 **25** regulatory definition; correct?
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12:11:52 **1** MS. O'DELL: Excuse me. Object to the
12:11:53 **2** form. Doesn't speak to the context.
12:11:56 **3** You may answer.
12:11:57 **4** THE WITNESS: Can you restate?
12:12:00 **5** MR. CHACHKES: Do you mind reading it
12:12:02 **6** back.
12:12:05 **7** (The record was read by the reporter.)
12:12:44 **8** THE WITNESS: Well, I mean, it would be
12:12:47 **9** based on the regulatory definition. So, I mean,
12:12:52 **10** that's all I can say about that.
12:12:55 **11** Again, I don't know what the context was
12:12:57 **12** in this. I can't speak for Dr. Longo. So
12:13:02 **13** that's the best answer I can give.
12:13:04 **14** Q. (By Mr. Chachkes) Is there any world in
12:13:05 **15** which it's correct to say that under your regulatory
12:13:08 **16** definition a TEM cannot tell you if you identify a
12:13:11 **17** single fiber whether or not that particle is
12:13:14 **18** asbestiform or nonasbestiform?
12:13:15 **19** MS. O'DELL: Object to the form.
12:13:17 **20** THE WITNESS: It's such a broad question
12:13:22 **21** about that, I don't know quite how to answer it,
12:13:26 **22** other than the way that I've already answered
12:13:28 **23** it. Because when you say in any world, I mean,
12:13:32 **24** it's very broad. Broad question.
12:13:34 **25** Q. (By Mr. Chachkes) Is there any way that
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12:13:36 **1** could be correct?
12:13:36 **2** A. I don't know.
12:13:38 **3** Q. Is there any peer-reviewed literature or
12:13:41 **4** regulatory material that says that TEM cannot tell
12:13:47 **5** you if you identify a single fiber whether or not
12:13:49 **6** that particle is asbestiform or nonasbestiform?
12:13:52 **7** A. I mean, I can't think of any as I sit
12:13:56 **8** here. I can't think of any.
12:13:57 **9** Q. Okay. Is there any regulatory material or
12:14:00 **10** peer-reviewed material that says the opposite, that
12:14:03 **11** TEM can tell you that if you identify a single fiber,
12:14:07 **12** whether or not that particle is asbestiform or
12:14:09 **13** nonasbestiform?
12:14:11 **14** MS. O'DELL: Object to the form.
12:14:13 **15** THE WITNESS: You're saying that it is not
12:14:24 **16** asbestiform?
12:14:25 **17** Q. (By Mr. Chachkes) So what I'm saying is,
12:14:28 **18** is there any peer-reviewed literature or regulatory
12:14:30 **19** material that confirms that TEM can tell you if you
12:14:35 **20** identify a single fiber whether or not that particle
12:14:38 **21** is asbestiform or nonasbestiform?
12:14:42 **22** A. Well, there are -- yes. I mean, there are
12:14:45 **23** a number of regulatory documents that say that it
12:14:48 **24** can.
12:14:48 **25** Q. Okay. Is 22262 one of those documents?
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12:14:52 **1** A. I would have to -- again, I would want to
12:14:55 **2** review 22262 again to look at that before I make that
12:14:59 **3** answer.
12:14:59 **4** Q. Well, you're using 22262 in this MDL case;
5 right?
12:15:04 **6** A. Yeah. I just need to review it again.
12:15:06 **7** Q. And you use TEM to identify whether a
12:15:08 **8** single fiber is or is not asbestiform in this case;
12:15:11 **9** right?
12:15:11 **10** MS. O'DELL: Object to the form.
12:15:12 **11** THE WITNESS: Yes.
12:15:12 **12** Q. (By Mr. Chachkes) And that was pursuant
12:15:13 **13** to 22262; correct?
12:15:15 **14** A. Well, no, it was not just the 22262.
12:15:18 **15** There were the other methods that were there, too.
16 Q. Okay.
12:15:21 **17** A. Yeah.
12:15:21 **18** Q. Did you follow the 22262 protocol for TEM?
12:15:25 **19** A. To my knowledge, we did. And that also
12:15:31 **20** is -- is also the same type of protocol that is in
12:15:34 **21** the ASTM and also the EPA methods. So yeah.
12:15:39 **22** Q. Does 22262 expressly say you can use TEM
12:15:43 **23** to identify whether or not a particle is asbestiform
12:15:47 **24** or nonasbestiform?
12:15:49 **25** A. Again, I would like to review that just to
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12:15:53 **1** be able to verify that it says -- actually says that.

12:15:58 **2 Q.** You were involved in many more reports

12:16:19 **3** concerning J&J talc other than the MDL reports;

12:16:23 **4** right?

12:16:24 **5** MS. O'DELL: Object to the form.

12:16:25 **6** THE WITNESS: Some other reports.

12:16:27 **7 Q.** (By Mr. Chachkes) So those were bottles

12:16:27 **8** that were not -- those are different bottles, not the

12:16:29 **9** MDL bottles?

12:16:30 **10** MS. O'DELL: Object to the form.

12:16:31 **11** THE WITNESS: They may have been, yes.

12:16:32 **12 Q.** (By Mr. Chachkes) You didn't issue any

12:16:34 **13** other reports on the bottles at issue in this case,

12:16:37 **14** have you?

12:16:38 **15** MS. O'DELL: Object to the form.

12:16:39 **16** THE WITNESS: Again, I don't recall.

12:16:42 **17 Q.** (By Mr. Chachkes) Are you aware that in

12:16:46 **18** the old reports the majority of particles you

12:16:50 **19** identified were fibers, and in this MDL the majority

12:16:53 **20** of particles you identified were bundles; are you

12:16:56 **21** aware of that?

12:16:57 **22 A.** I'd have to look back at the reports to

12:16:59 **23** make that conclusion.

12:17:01 **24 Q.** Okay. Given that the old reports and the

12:17:07 **25** new reports are both on J&J bottles, would you expect
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12:18:14 **1** MS. O'DELL: Object to the form.

12:18:16 **2** THE WITNESS: Could you just restate that?

12:18:27 **3** MR. CHACHKES: Do you mind reading that

12:18:29 **4** back.

12:18:29 **5** THE WITNESS: I know she can read it back,

12:18:31 **6** but can you restate it another way?

12:18:32 **7 Q.** (By Mr. Chachkes) It's going to be read

12:18:33 **8** back. Sorry.

12:18:34 **9** MS. O'DELL: And if you still need that

12:18:36 **10** question rephrased, you may --

12:18:37 **11** THE WITNESS: That would be nice.

12:18:38 **12** MS. O'DELL: You may ask that.

12:18:40 **13** THE WITNESS: I'd like it to be rephrased.

12:18:42 **14** MR. CHACHKES: As long as we keep talking,

12:18:44 **15** she keeps typing.

12:18:48 **16** (The record was read by the reporter.)

12:19:12 **17** MS. O'DELL: Object to the form.

12:19:14 **18** THE WITNESS: Rephrase.

12:19:15 **19 Q.** (By Mr. Chachkes) Would you expect that

12:19:18 **20** your fiber-to-bundle ratio for the Vermont samples

12:19:22 **21** from your old reports would be reproducible in

12:19:29 **22** analyzing another set of bottles like the set of

12:19:32 **23** bottles in the MDL?

12:19:33 **24** MS. O'DELL: Object to the form.

12:19:36 **25 Q.** (By Mr. Chachkes) From the same mine?
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12:17:11 **1** the same fiber-to-bundle ratio in the two separate

12:17:16 **2** sets of reports?

12:17:17 **3** MS. O'DELL: Object to form.

12:17:18 **4** THE WITNESS: Not necessarily.

12:17:18 **5 Q.** (By Mr. Chachkes) Why not?

12:17:19 **6 A.** You get variation depending upon where the

12:17:22 **7** material was mined and combined.

12:17:25 **8 Q.** For a -- if you isolate a single mine,

12:17:30 **9** let's say, just Vermont --

12:17:31 **10 A.** Okay.

12:17:31 **11 Q.** -- would you expect the old reports, the

12:17:35 **12** fiber-to-bundle ratio, to match the MDL report?

12:17:38 **13** MS. O'DELL: Object to the form.

12:17:39 **14** THE WITNESS: I would expect that they may

12:17:47 **15** follow the same kinds of trends, you know, as

12:17:51 **16** far as aspect ratio, that type of thing, yeah.

12:17:53 **17 Q.** (By Mr. Chachkes) But what about the

12:17:55 **18** fiber-to-bundle ratio?

12:17:56 **19 A.** Again, I'd have to look at that. I can't

12:17:59 **20** make a conclusion on that without looking at it.

12:18:01 **21 Q.** Okay. So sitting here today you can't

12:18:05 **22** tell me if you would expect a certain degree of

12:18:08 **23** reproducibility for the Vermont mine bottles from the

12:18:12 **24** old reports as compared to the MDL bottles in this

12:18:14 **25** report?
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12:19:37 **1** MS. O'DELL: Object to the form.

12:19:38 **2** THE WITNESS: You know, I'm not a

12:19:39 **3** geologist. But once again, the -- you would

12:19:45 **4** have -- I would expect some variation. I would

12:19:48 **5** expect some variation.

12:19:49 **6 Q.** (By Mr. Chachkes) When you say some

12:19:50 **7** variation, can you quantify?

12:19:51 **8 A.** No. No. But I would expect because the

12:19:55 **9** materials out of the ground are, you know --

12:19:59 **10** depending upon the way they have been mixed, ground,

12:20:02 **11** mined, all of that, you could have some variation in

12:20:06 **12** that. Whether they were using a specific kind of

12:20:09 **13** flotation process at one time versus another, all of

12:20:12 **14** that kind of thing, you could get some variation.

12:20:15 **15 Q.** Okay. Is it your position that the

12:20:19 **16** modified Blount TEM method you employed in your

12:20:24 **17** March 2018 report is materially identical to ISO

12:20:28 **18** 22262?

12:20:29 **19 A.** It is substantially the same.

12:20:35 **20 Q.** Is it materially the same?

12:20:36 **21 A.** Substantially the same. If you're saying

12:20:39 **22** exactly the same, is that what you're asking?

12:20:41 **23 Q.** Well, let's do that. Is it exactly the

12:20:44 **24** same?

12:20:44 **25 A.** Okay. I'd say substantially the same.
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12:20:46 **1** Q. Okay. What degree do they differ?
 12:20:50 **2** What ways do they differ?
 12:20:50 **3** A. There may be some variation, slight
 12:20:52 **4** variation in the densities, the heavy density liquid.
 12:20:55 **5** Q. Any other variation?
 12:20:56 **6** A. I can't think of any right off the bat.
 12:20:59 **7** Q. What's the average width of a tremolite
 12:21:02 **8** fiber under TEM?
 12:21:03 **9** A. That varies depending on the size.
 12:21:05 **10** Q. And when you say depending on the size,
 12:21:09 **11** what do you mean by that?
 12:21:10 **12** A. Well, I mean, it depends. It varies. It
 12:21:12 **13** can be 1/10 of a micron and up.
 12:21:14 **14** Q. So there's no -- in the published
 12:21:21 **15** literature there's no average width of a tremolite
 12:21:22 **16** fiber?
 12:21:23 **17** MS. O'DELL: Object to the form.
 12:21:24 **18** THE WITNESS: Oh, gosh. I don't know.
 12:21:32 **19** There may be. But as far as there being an
 12:21:36 **20** arrange width, again, it depends on how it's
 12:21:38 **21** been mined and milled and processed.
 12:21:41 **22** Q. (By Mr. Chachkes) Is there an average
 12:21:42 **23** width of an anthophyllite fiber under TEM?
 12:21:44 **24** A. Same answer.
 12:21:45 **25** Q. What's the largest width an anthophyllite
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12:21:48 **1** particle can have and still be characterized as a
 12:21:51 **2** fiber under a TEM?
 12:21:52 **3** A. As far -- as long as there are bundled
 12:21:59 **4** fibrils in there, you know, it could be pretty large.
 12:22:03 **5** Q. Well, the question's really what's the
 12:22:05 **6** largest width an anthophyllite particle can have and
 12:22:08 **7** still be characterized as a fiber?
 12:22:10 **8** A. Well, if it has the aspect ratio, it will
 12:22:13 **9** still be -- it can be pretty large. It will still be
 12:22:15 **10** considered as a fiber by TEM.
 12:22:17 **11** Q. Okay. And so you don't have an upper
 12:22:19 **12** boundary by which you'll no longer say that's an
 12:22:23 **13** anthophyllite fiber?
 12:22:25 **14** MS. O'DELL: Object to the form.
 12:22:26 **15** Q. (By Mr. Chachkes) The width, I'm talking
 12:22:27 **16** about.
 12:22:27 **17** A. On a width. Well, again, it's got to meet
 12:22:30 **18** the aspect ratio.
 12:22:31 **19** Q. But any time it meets the aspect ratio, it
 12:22:34 **20** doesn't matter how wide it is, you can still
 12:22:37 **21** characterize it as an anthophyllite particle?
 12:22:38 **22** A. Well, I mean, when you go from the TEM to
 12:22:41 **23** the PLM scale, you're going orders of magnitude in
 12:22:44 **24** size, and these are called fibrils. So, you know,
 12:22:47 **25** they can be pretty darn large.
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12:22:49 **1** Q. What's the largest width a tremolite
 12:22:52 **2** particle can have and still be characterized as a
 12:22:56 **3** fiber under TEM? Same answer?
 12:22:58 **4** A. Yeah.
 12:22:58 **5** Q. Okay. Are all of the fibers that you've
 12:23:05 **6** identified in your reports as asbestos or asbestiform
 12:23:11 **7** formed in the fibrous crystalline habit?
 12:23:14 **8** A. Originally, you know, looking at the
 12:23:18 **9** structures, we get into that question of them being
 12:23:22 **10** formed in a crystalline habit. So that is a growth
 12:23:29 **11** mode for the production of the fibrils; but also, if
 12:23:34 **12** you -- how do you want to say it?
 12:23:41 **13** If massive tremolite, for instance, is
 12:23:46 **14** milled a certain way, it can break in cleavage planes
 12:23:51 **15** that will make it into the fibrils that are, you
 12:23:56 **16** know, regulated type fibrils. Sure, you'll get
 12:23:59 **17** cleavage fragments, ones that appear triangular and,
 12:24:04 **18** you know, different kinds of shapes, but you will
 12:24:06 **19** produce these other kind of fibrils too that will
 12:24:09 **20** meet the definition.
 12:24:10 **21** Q. Okay. So a mineral that has a
 12:24:18 **22** nonregulated and a regulated version can be connected
 12:24:23 **23** in the cleavage plane but can be broken up such that
 12:24:27 **24** it would become in your mind a regulated asbestos
 12:24:29 **25** fiber?
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12:24:30 **1** MS. O'DELL: Object to the form.
 12:24:31 **2** THE WITNESS: Well, this does happen.
 12:24:35 **3** This does happen. And there's a recent
 12:24:40 **4** publication for -- I think it's amosite,
 12:24:45 **5** grunerite, that shows this happens.
 12:24:48 **6** Q. (By Mr. Chachkes) Okay. What's the
 12:24:49 **7** publication you're citing now?
 12:24:50 **8** A. It's a 2019. It's a recent publication.
 12:24:54 **9** Q. Can you tell me the name of it?
 12:24:55 **10** A. It's by Germine and Puffer, I believe it
 12:24:59 **11** is.
 12:25:00 **12** Q. And you don't cite that in your report, do
 12:25:02 **13** you?
 12:25:02 **14** A. Excuse me?
 12:25:03 **15** Q. You don't cite that in your report --
 12:25:04 **16** A. No, no. That's a recent publication.
 12:25:06 **17** Q. And who are Germain and Puffer?
 12:25:09 **18** A. They're a couple of researchers, I
 12:25:11 **19** believe, at UC Cal.
 12:25:12 **20** Q. Do you know who funded their research?
 12:25:15 **21** A. I think the university did.
 12:25:16 **22** Q. Okay. So am I correct in understanding
 12:25:20 **23** your testimony that not everything you've identified
 12:25:23 **24** as asbestos and asbestiform in your report was formed
 12:25:28 **25** in the -- necessarily formed in the crystalline
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12:25:31 **1** habit?
 12:25:31 **2** MS. O'DELL: Object to the form.
 12:25:33 **3** THE WITNESS: Well, again, it's not part
 12:25:34 **4** of the definition, that it be in the crystalline
 12:25:37 **5** habit. The definition has the parameters that
 12:25:40 **6** we discussed already. If it is in that form,
 12:25:45 **7** it's going to be classified like that.
 12:25:48 **8** **Q.** (By Mr. Chachkes) If something is formed
 12:25:53 **9** in the crystalline habit and has an aspect ratio
 12:25:56 **10** under 5-to-1, would you call it regulated asbestos?
 12:25:59 **11** **A.** Well, if it's 3-to-1, OSHA would.
 12:26:02 **12** **Q.** If something was formed in the fibrous
 12:26:04 **13** crystalline habit and was in a 2-to-1 aspect ratio,
 12:26:08 **14** would you call it asbestos?
 12:26:10 **15** **A.** That wouldn't meet the definition.
 12:26:12 **16** **Q.** Okay. Does MAS have a protocol in place
 12:26:18 **17** for describing the dimensions of fibers under a TEM?
 12:26:22 **18** **A.** Yes.
 12:26:22 **19** **Q.** Is it written?
 12:26:24 **20** **A.** Yes, it's in accordance with the standard
 12:26:26 **21** methods, all of these standard methods we've
 12:26:28 **22** discussed.
 12:26:29 **23** **Q.** Okay. So your written protocol for
 12:26:37 **24** identifying what's asbestos or not under a TEM is
 12:26:39 **25** just basically a repeat of the regulations?
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12:27:35 **1** samples you've reported on for TEM that is somewhere
 12:27:39 **2** in your laboratory, like an electronic file that's
 12:27:41 **3** not been produced, not in paper form for us?
 12:27:44 **4** **A.** Not that I know of, no.
 12:27:45 **5** **Q.** Was there any data generated in connection
 12:27:48 **6** with the TEM analysis in this case that was thrown
 12:27:53 **7** away or deleted?
 12:27:54 **8** **A.** No.
 12:27:54 **9** **Q.** I'm moving on to a new topic. It's
 12:27:59 **10** 12:30ish. I'm happy to keep going. It would be a
 12:28:02 **11** good breaking point but --
 12:28:04 **12** **A.** I'm good to go. We can go.
 12:28:06 **13** **Q.** Okay. I mean, we're going to have a lunch
 12:28:08 **14** and we're going to come back, so it's not like we're
 12:28:11 **15** going to finish before lunch.
 12:28:13 **16** **A.** Oh. Oh, well.
 12:28:13 **17** MS. O'DELL: It's up to you, Doctor. If
 12:28:15 **18** you want to go a little longer --
 12:28:16 **19** THE WITNESS: We can take a break if you
 12:28:16 **20** want to take a break.
 12:28:17 **21** MS. PARFITT: It's up to you.
 12:28:18 **22** MS. O'DELL: It's really up to you.
 12:28:21 **23** THE WITNESS: Okay. That's good. Break.
 12:28:22 **24** (Lunch recess from 12:28 p.m. to 1:38 p.m.)
 13:38:49 **25** **Q.** (By Mr. Chachkes) Good afternoon.
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12:26:41 **1** **A.** Yes.
 12:26:42 **2** **Q.** Okay. No change whatsoever --
 12:26:44 **3** **A.** Well, I mean, it's -- it's in accordance
 12:26:49 **4** with the regulation.
 12:26:50 **5** **Q.** Okay. What form is it in? Is it like a
 12:26:55 **6** piece of paper on a wall so TEM scientists can look
 12:26:57 **7** at it? Is it an email? What it is?
 12:26:59 **8** MS. O'DELL: Object to the form.
 12:27:00 **9** THE WITNESS: It's a protocol. We have a
 12:27:02 **10** protocol that the analysts have to abide by.
 12:27:05 **11** **Q.** (By Mr. Chachkes) Just physically, is it
 12:27:07 **12** a piece of paper that analysts memorize --
 12:27:10 **13** **A.** It's a document, yeah.
 12:27:11 **14** **Q.** Okay. Do the analysts have it near
 12:27:13 **15** them --
 12:27:14 **16** **A.** It's a standard operating procedure we
 12:27:16 **17** have.
 12:27:16 **18** **Q.** Okay. So we would ask that that be
 12:27:18 **19** produced.
 12:27:19 **20** Does MAS have a protocol in place for
 12:27:22 **21** describing the dimensions of fibers under TEM, or is
 12:27:26 **22** that the same answer?
 12:27:27 **23** **A.** Same answer.
 12:27:27 **24** **Q.** Same, okay.
 12:27:33 **25** Is there additional data concerning the
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13:39:27 **1** **A.** Good afternoon.
 13:39:27 **2** **Q.** Am I correct that you are not going to
 13:39:30 **3** testify about the PLM results in your report?
 13:39:34 **4** **A.** That's correct.
 13:39:34 **5** **Q.** Okay. I'll skip PLM questioning because
 13:39:38 **6** of that.
 13:39:38 **7** Am I correct that you are not going to
 13:39:40 **8** testify about J3 results in your report?
 13:39:43 **9** **A.** Dr. Longo will testify on that.
 13:39:45 **10** **Q.** Okay. Not you; right?
 13:39:47 **11** **A.** Correct.
 13:39:47 **12** **Q.** Okay. So I'm going to skip questions on
 13:39:50 **13** J3.
 13:39:51 **14** Let me just ask one question, though. Why
 13:39:54 **15** did MAS use J3?
 13:39:57 **16** **A.** MAS used J3 to do XRD analysis. MAS
 13:40:03 **17** doesn't have XRD capabilities.
 13:40:05 **18** **Q.** But they did some other things beyond XRD;
 13:40:08 **19** right?
 13:40:09 **20** **A.** J3?
 13:40:09 **21** **Q.** Yeah.
 13:40:09 **22** **A.** Yes.
 13:40:10 **23** **Q.** Okay. Why did they do those things?
 13:40:13 **24** **A.** To my knowledge, it was to help verify
 13:40:17 **25** results.
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13:40:18 **1** Q. Verify results of things that were
 13:40:20 **2** otherwise being duplicated by MAS?
 13:40:23 **3** A. There may have been some of that, yes.
 13:40:25 **4** Again, if you would ask Dr. Longo about that, please.
 13:40:27 **5** Q. Okay. What's an example of silicate, some
 13:40:32 **6** silicate materials?
 13:40:33 **7** A. Well, a whole group of phyllosilicates are
 13:40:39 **8** clay, clay minerals. There's lots of silicates. I
 13:40:43 **9** mean, the earth's crust is covered with silicates.
 13:40:46 **10** Q. Is talc a silicate?
 13:40:47 **11** A. Yes.
 13:40:47 **12** Q. Are you aware that there's different
 13:40:50 **13** grades of talc?
 13:40:50 **14** A. Yes.
 13:40:51 **15** Q. What are those grades?
 13:40:54 **16** A. Well, they vary by composition, color,
 13:40:57 **17** size, particle size, that type of thing.
 13:40:59 **18** Q. Is talc an asbestiform mineral?
 13:41:05 **19** A. Fibrous talc could be described as an
 13:41:10 **20** asbestiform, yes.
 13:41:11 **21** Q. Are asbestiform minerals silicates?
 13:41:15 **22** A. Yes.
 13:41:16 **23** Q. Do you know how many amphibole mineral
 13:41:23 **24** species there are?
 13:41:24 **25** A. Quite a few.
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13:41:24 **1** Q. Do you have an estimate?
 13:41:25 **2** A. Not right off the top of my head. I bet
 13:41:29 **3** it's many.
 13:41:30 **4** Q. Like more than 10?
 13:41:31 **5** A. Yes.
 13:41:31 **6** Q. More than 30?
 13:41:33 **7** A. Yes.
 13:41:33 **8** Q. When it comes time to give analysts in
 13:41:40 **9** your labs samples of J&J talc to analyze, do you
 13:41:44 **10** distribute them completely randomly?
 13:41:47 **11** MS. O'DELL: Object to the form.
 13:41:48 **12** THE WITNESS: Again, you would have to ask
 13:41:49 **13** Dr. Longo about that. The TEM manager is the
 13:41:54 **14** one who distributes the samples once they come
 13:41:57 **15** in.
 13:41:57 **16** Q. (By Mr. Chachkes) Okay. Would it be
 13:41:59 **17** better to distribute them randomly?
 13:42:01 **18** MS. O'DELL: Object to the form.
 13:42:03 **19** THE WITNESS: Well, I mean, we're going to
 13:42:07 **20** analyze the samples that we receive, so, you
 13:42:11 **21** know, random or not, it wouldn't make any
 13:42:14 **22** difference.
 13:42:14 **23** Q. (By Mr. Chachkes) Would you expect two
 13:42:21 **24** analysts to identify the same asbestos concentration
 13:42:24 **25** from the same bottle of J&J talc?
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13:42:27 **1** A. The answer to that is yes, I would expect
 13:42:35 **2** that.
 13:42:36 **3** Q. And is that empirically what you've been
 13:42:40 **4** seeing?
 13:42:41 **5** MS. O'DELL: Object to the form.
 13:42:42 **6** THE WITNESS: Again, I don't know which
 13:42:44 **7** ones you're referring to here. But from a
 13:42:49 **8** quality standpoint, they do see the same things.
 13:42:52 **9** Q. (By Mr. Chachkes) Okay. If one --
 13:42:54 **10** hypothetically, if one analyst looked at a bottle and
 13:42:57 **11** saw 10,000 fibers per gram and another analyst looked
 13:43:00 **12** at the same bottle and got a nondetect, would that be
 13:43:03 **13** within the margin of error?
 13:43:06 **14** MS. O'DELL: Object to the form.
 13:43:10 **15** THE WITNESS: That would depend on the
 13:43:12 **16** statistics that we were using, whether -- that
 13:43:17 **17** would depend.
 13:43:19 **18** Q. (By Mr. Chachkes) Depend on what?
 13:43:20 **19** A. It would depend on the number of
 13:43:22 **20** structures that they saw.
 13:43:23 **21** Q. Okay. Well, you know how you determine
 13:43:27 **22** structures; correct?
 13:43:28 **23** A. Yes. Yes.
 13:43:28 **24** Q. And you know the number of structures you
 13:43:30 **25** need to extrapolate to 10,000 per gram?
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13:43:33 **1** A. Well, again, that varies. That can vary,
 13:43:39 **2** as I say, depending on what the detection limit is.
 13:43:42 **3** So when you're saying a certain number per gram,
 13:43:48 **4** that's based on it being above a certain detection
 13:43:51 **5** limit. So you may want to ask the question again to
 13:43:55 **6** clarify a little more.
 13:43:55 **7** Q. Well, let's say one analyst analyzed an
 13:44:02 **8** aliquot from a bottle and saw 10 fibers and another
 13:44:05 **9** analyst analyzed an aliquot and didn't detect any
 13:44:08 **10** fibers. Would that be within the margin of error?
 13:44:11 **11** A. No.
 13:44:11 **12** Q. Why not?
 13:44:12 **13** A. That would be outside the margin of error.
 13:44:14 **14** Q. Can you narrow for me what that margin of
 13:44:17 **15** error is?
 13:44:18 **16** A. Well, in our laboratory the coefficient of
 13:44:23 **17** variation between analysts is around I think 5 or
 13:44:27 **18** 7 percent, something like that. So I would expect
 13:44:35 **19** the variation to be not much more than that. Maybe
 13:44:40 **20** 1 fiber difference, something like that, depending
 13:44:42 **21** upon how many fibers they found.
 13:44:44 **22** Q. When you say coefficient of variation,
 13:44:46 **23** you're referring to the coefficient of variation
 13:44:49 **24** study that you all did?
 13:44:49 **25** A. Yes. Yes.
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13:44:50 **1** Q. And were you part of that?
 13:44:51 **2** A. Yes.
 13:44:51 **3** Q. What about would the same coefficient of
 13:45:00 **4** variation apply to the difference in type of asbestos
 13:45:06 **5** that the analysts are finding?
 13:45:08 **6** A. It should. Yes.
 13:45:10 **7** Q. Okay. So you would expect that the ratio
 13:45:12 **8** of tremolite to anthophyllite in a bottle should
 13:45:17 **9** remain relatively constant amongst different analysts
 13:45:20 **10** within 5 to 7 percent?
 13:45:21 **11** A. Yes.
 13:45:21 **12** Q. If the numbers were completely out of
 13:45:29 **13** whack with that, let's say there was 30 percent
 13:45:32 **14** difference, would you believe you need to rerun the
 13:45:35 **15** results, or would you average the two? What would be
 13:45:38 **16** your reaction?
 13:45:39 **17** MS. O'DELL: Object to the form.
 13:45:40 **18** THE WITNESS: Well, if the analysts
 13:45:44 **19** weren't seeing the same thing -- I mean, this is
 13:45:48 **20** the way we run the QC. For instance, if they
 13:45:52 **21** haven't found -- if you put them in the same
 13:45:56 **22** grid square and they haven't found the same
 13:45:59 **23** number of structures there, then you
 13:46:03 **24** typically -- we go back, we look at what was
 13:46:05 **25** there, we sit down with the analyst and try to
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13:46:08 **1** understand why there is a difference like that,
 13:46:11 **2** and then we resolve the difference at that
 13:46:14 **3** point.
 13:46:14 **4** Now, that's the way the process typically
 13:46:17 **5** works.
 13:46:17 **6** Q. (By Mr. Chachkes) Was your coefficient of
 13:46:19 **7** variation study analysts looking at the same grid
 13:46:22 **8** square?
 13:46:22 **9** A. Yes.
 13:46:22 **10** Q. Okay. Let's do it in a completely
 13:46:25 **11** different hypothetical.
 13:46:25 **12** A. All right.
 13:46:26 **13** Q. The two analysts in your lab take aliquots
 13:46:29 **14** out of a bottle that are different, so they end up
 13:46:31 **15** looking at different grid squares.
 13:46:33 **16** A. Yes.
 13:46:33 **17** Q. Would you expect the results to be the
 13:46:35 **18** same?
 13:46:36 **19** MS. O'DELL: Object to the form.
 13:46:37 **20** THE WITNESS: If the sample was
 13:46:41 **21** homogeneous, let's hypothetically say that it is
 13:46:46 **22** completely homogeneous, then, yes, I would
 13:46:48 **23** expect the same kinds of results.
 13:46:50 **24** Q. (By Mr. Chachkes) Do you know whether or
 13:46:51 **25** not bottles are homogeneous, samples are homogeneous?
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13:46:56 **1** A. They should be because they're mixed prior
 13:46:59 **2** to the actual analysis, you know, they're mixed in
 13:47:02 **3** preparation, the sample is.
 13:47:03 **4** Q. Wouldn't you expect greater variation when
 13:47:06 **5** two analysts are looking at their own grids
 13:47:12 **6** separately rather than comparing what they see under
 13:47:15 **7** the same grid?
 13:47:16 **8** MS. O'DELL: Object to the form.
 13:47:17 **9** THE WITNESS: Yeah. That's a good
 13:47:19 **10** question. We're not doing chemistry here.
 13:47:23 **11** We're doing particle analysis. So in chemistry
 13:47:26 **12** where you have something that is in, for
 13:47:29 **13** instance, in solution, it's mixed in solution,
 13:47:31 **14** it's dispersed in that solution by Brownian
 13:47:37 **15** motion forces that keep it very random and
 13:47:39 **16** mixed.
 13:47:40 **17** Wherein a particle solution, if you want
 13:47:44 **18** to call it that, you can have variation based on
 13:47:46 **19** the particle size and a number of factors, but
 13:47:50 **20** the objective is to make the samples as
 13:47:53 **21** homogeneous as possible.
 13:47:54 **22** So you would expect them, if they took a
 13:47:56 **23** sample from the same bottle and they're both
 13:47:58 **24** homogeneous, you should get close to the same
 13:48:01 **25** answer.
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13:48:01 **1** Q. (By Mr. Chachkes) Okay. In your
 13:48:04 **2** experience do two of your analysts looking at the
 13:48:06 **3** same exact grid identify the same bundle-to-fiber
 13:48:11 **4** ratio?
 13:48:12 **5** A. I would say that most of the time they do.
 13:48:18 **6** There may be some slight variations in the size of
 13:48:23 **7** the structure. It will be the same structure because
 13:48:25 **8** you can see it in the images that they make, but they
 13:48:30 **9** may have some slight variation in the size based on
 13:48:33 **10** the microscope that's being used because a couple of
 13:48:37 **11** the scopes we have have slightly different gratitudes
 13:48:42 **12** in the scope so there may be a little difference in
 13:48:45 **13** the length or the width, just a slight amount.
 13:48:47 **14** Q. But generally speaking, you would expect
 13:48:49 **15** two analysts in your laboratory looking at the same
 13:48:51 **16** grid pattern to roughly identify the same
 13:48:55 **17** fiber-to-bundle ratio?
 13:48:56 **18** A. Yes.
 13:48:58 **19** Q. Roughly speaking, you would expect two
 13:49:00 **20** analysts looking at the same grid opening to --
 13:49:08 **21** roughly speaking, you would expect two analysts
 13:49:10 **22** looking at the same grid opening to identify the same
 13:49:14 **23** asbestos type composition, like anthophyllite versus
 13:49:17 **24** tremolite versus no detect?
 13:49:20 **25** A. Yes.
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13:49:20 **1** Q. Okay. And that's based on the coefficient
 13:49:22 **2** of variation study?
 13:49:23 **3** A. Yes, and also their training. So they're
 13:49:27 **4** well versed in this.
 13:49:28 **5** Q. Okay. You wouldn't know whether Lee Poye
6 would expect the same thing?
7 THE REPORTER: I'm sorry, you would or
8 wouldn't?
 13:49:39 **9** Q. (By Mr. Chachkes) You would not expect --
 13:49:40 **10** you would not know whether Lee Poye would say the
 13:49:41 **11** same thing --
12 MS. O'DELL: Object to the form.
 13:49:42 **13** Q. (By Mr. Chachkes) -- is that outside of
 13:49:43 **14** your knowledge?
 13:49:44 **15** MS. O'DELL: Excuse me, I didn't mean to
 13:49:46 **16** interrupt you. Are you finished?
 13:49:48 **17** Object to the form.
 13:49:49 **18** THE WITNESS: All right. Well, as being a
 13:49:54 **19** certified laboratory and having earned
 13:49:57 **20** protocols, I would expect that their analysts
 13:49:59 **21** would find the same kinds of things. There may
 13:50:03 **22** be some variation, but again, you know, there is
 13:50:10 **23** slight variation between laboratories.
 13:50:12 **24** Q. (By Mr. Chachkes) Okay. Did you ever
 13:50:13 **25** quantify the slight variation between laboratories?
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 13:50:16 **1** MS. O'DELL: Object to the form.
 13:50:17 **2** THE WITNESS: In this case, no. We did
 13:50:20 **3** see variation, and that's in the report. But
 13:50:25 **4** again, it doesn't change what has been found.
 13:50:30 **5** There were, I believe, a couple by TEM that we
 13:50:33 **6** weren't able to verify, so, you know, it does
 13:50:35 **7** happen.
 13:50:35 **8** Q. (By Mr. Chachkes) Would you --
 13:50:41 **9** A. But for the most part, we did agree.
 13:50:44 **10** Q. Okay. Let's compare -- let's talk about
 13:50:48 **11** on the one hand the non-MDL samples that you guys
 13:50:52 **12** have analyzed of J&J talc, and on the other hand MDL
 13:50:56 **13** samples of J&J talc.
 13:50:57 **14** Would you expect the results for, let's
 13:51:01 **15** say, 150 tests of the non-MDL samples to look roughly
 13:51:08 **16** like the 150 tests of the MDL samples?
 13:51:13 **17** MS. O'DELL: Objection to form. Without
 13:51:15 **18** limitation on time, et cetera? Product?
 13:51:19 **19** THE WITNESS: It's a hypothetical. But if
 13:51:23 **20** there -- I mean, if they're the same product
 13:51:26 **21** from the same lot, I would expect similar
 13:51:29 **22** results.
 13:51:29 **23** Q. (By Mr. Chachkes) What about without that
 13:51:33 **24** qualification, let's say we know they're from the
 13:51:36 **25** same mine but you know nothing else, would you expect
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13:51:42 **1** the results from the non-MDL samples to look like the
 13:51:46 **2** MDL samples?
 13:51:47 **3** A. I mean, if they're splits of the same
 13:51:51 **4** sample or -- oh, they're different.
 13:51:51 **5** Q. They're different. So you understand that
 13:51:53 **6** the non-MDL samples are literally different bottles
 13:51:56 **7** than the MDL samples?
 13:51:58 **8** A. Yeah. I don't have an opinion on that. I
 13:52:04 **9** don't have an opinion. I'd have to think about that.
 13:52:06 **10** Q. Would you expect the type of asbestos
 13:52:08 **11** found to be roughly the same?
 13:52:11 **12** A. Same answer.
 13:52:12 **13** Q. Okay. No opinion?
 13:52:15 **14** A. Yeah, right.
 13:52:16 **15** Q. If you had an analyst who told you he had
 13:52:24 **16** a nondetect for asbestos in a bottle, a sample from a
 13:52:28 **17** bottle --
 13:52:28 **18** A. Yes.
 13:52:29 **19** Q. -- would you expect another analyst
 13:52:32 **20** separately on a different day analyzing that same
 13:52:35 **21** bottle to get a nondetect?
 13:52:38 **22** A. If the sample was prepared the same way
 13:52:47 **23** and the detection limit was the same, I would expect
 13:52:52 **24** similar results.
 13:52:53 **25** Q. Okay. That goes to the reproducibility of
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 13:52:58 **1** your --
 13:52:59 **2** A. Yeah.
 13:52:59 **3** Q. Okay. When you present -- what's more
 13:53:05 **4** accurate of a representation of what's in a bottle of
 13:53:09 **5** J&J talc, a single analysis or multiple analyses
 13:53:16 **6** separately averaged?
 13:53:18 **7** MS. O'DELL: Object to the form.
 13:53:19 **8** THE WITNESS: Let me put it in terms of
 13:53:28 **9** how FDA does their thing. A laboratory runs a
 13:53:35 **10** study to validate a method. That's the way it's
 13:53:39 **11** done. They will validate the method based on
 13:53:43 **12** accuracy, precision, reproducibility, stability,
 13:53:46 **13** all these different factors.
 13:53:48 **14** And when they're done with that, when
 13:53:51 **15** they're done with that validation study, now
 13:53:53 **16** they have a method that they will use that is
 13:53:56 **17** allowed to use one sample from that to get a
 13:54:00 **18** result. Because they validated their
 13:54:06 **19** methodology and are using a standard
 13:54:07 **20** methodology, that's what's allowed by FDA.
 13:54:11 **21** So I would expect one sample should be
 13:54:12 **22** fine. You can do more, you can average more,
 13:54:16 **23** but the one sample should be representative
 13:54:19 **24** based on the methodology.
 13:54:20 **25** Q. (By Mr. Chachkes) So my question was not
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13:54:22 **1** about adequacy or what follows regulatory methods.
 13:54:28 **2** I'm just saying what would you personally believe to
 13:54:30 **3** be more reliable, a single analysis from a bottle or
 13:54:36 **4** multiple separate analyses from a bottle averaged?
 13:54:39 **5** MS. O'DELL: Object to the form.
 13:54:40 **6** THE WITNESS: I would say the single
 13:54:42 **7** sample based on the methodology that we use that
 13:54:45 **8** has been validated, published. A single sample
 13:54:50 **9** should be fine.
 13:54:51 **10** **Q.** (By Mr. Chachkes) Do you expect that the
 13:54:52 **11** multiple samples' average would be precisely the
 13:54:55 **12** same?
 13:54:56 **13** **A.** I don't know about --
 13:54:57 **14** MS. O'DELL: Object to form.
 13:54:58 **15** THE WITNESS: -- precisely the same, but
 13:54:59 **16** they should be very similar.
 13:55:01 **17** **Q.** (By Mr. Chachkes) But you're not going to
 13:55:02 **18** say that one's better in terms of a more accurate
 13:55:05 **19** representation of what's in the bottle?
 13:55:07 **20** MS. O'DELL: Object to the form.
 13:55:08 **21** THE WITNESS: Well, now you've got an
 13:55:09 **22** average. So you got an average of multiples,
 13:55:13 **23** they should be very similar.
 13:55:14 **24** If you take a single, you should get a
 13:55:17 **25** representative that is close to the average, you
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13:55:20 **1** know, within one standard definition of the
 13:55:22 **2** average. So that's what I would expect.
 13:55:24 **3** **Q.** (By Mr. Chachkes) Okay.
 13:55:25 **4** **A.** And it's acceptable to have something
 13:55:27 **5** within two to three standard deviations.
 13:55:30 **6** **Q.** I'm just asking a question about which
 13:55:31 **7** would be more representative of what objectively is
 13:55:34 **8** in the bottle, one analysis or multiple analyses
 13:55:39 **9** averaged, which would be more representative?
 13:55:41 **10** MS. O'DELL: Object to the form.
 13:55:42 **11** THE WITNESS: Well, the single can be
 13:55:43 **12** representative, absolutely.
 13:55:44 **13** **Q.** (By Mr. Chachkes) And --
 13:55:45 **14** **A.** I know you're saying more, I get that.
 13:55:47 **15** **Q.** Yeah.
 13:55:47 **16** **A.** I understand that.
 13:55:47 **17** **Q.** Can you answer the question?
 13:55:48 **18** **A.** Sure.
 13:55:48 **19** **Q.** Which is more representative?
 13:55:49 **20** **A.** Which is more representative?
 13:55:51 **21** **Q.** Yeah.
 13:55:51 **22** **A.** Any of those three, if there were three of
 13:55:54 **23** them, would be representative. Any of them.
 13:55:55 **24** **Q.** Okay. So if someone presented you a data
 13:55:59 **25** for one analysis of the asbestos concentration for a
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13:56:04 **1** bottle and someone else presented you, let's say, ten
 13:56:07 **2** different analyses, separate analyses averaged, you
 13:56:10 **3** would say those are equally representative, the
 13:56:13 **4** standard definitions, the margin of error, same for
 13:56:16 **5** both?
 13:56:17 **6** MS. O'DELL: Object to the form.
 13:56:18 **7** THE WITNESS: Well, the ten will give you
 13:56:21 **8** an average with a standard deviation, and if
 13:56:23 **9** that single one falls within that, it's still
 13:56:27 **10** adequate analysis of that and it's still
 13:56:30 **11** acceptable.
 13:56:30 **12** **Q.** (By Mr. Chachkes) The question is would
 13:56:32 **13** those two examples have the same standard deviations
 13:56:35 **14** and margins of error?
 13:56:37 **15** MS. O'DELL: Object to the form.
 13:56:38 **16** THE WITNESS: Well, they won't. Of
 13:56:39 **17** course, you've got one that's got ten and one
 13:56:41 **18** has one. But I'm going by a method that's been
 13:56:44 **19** validated as accepted as a standard method. You
 13:56:48 **20** should be able to take one sample and it be
 13:56:50 **21** representative, yes.
 13:56:50 **22** **Q.** (By Mr. Chachkes) When you say they won't
 13:56:51 **23** have the same margin of error, the average of ten
 13:56:54 **24** would have a smaller margin of error; correct?
 13:56:57 **25** **A.** Not --
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13:56:57 **1** MS. O'DELL: Object to the form.
 13:56:59 **2** THE WITNESS: -- necessarily. It could.
 13:57:00 **3** It could. Yep.
 13:57:01 **4** **Q.** (By Mr. Chachkes) Okay. In what instance
 13:57:01 **5** would the ten done by the exact same procedure have a
 13:57:04 **6** larger margin of error when averaged than the one?
 13:57:07 **7** **A.** Well, the one's not going to -- the one is
 13:57:10 **8** the one. So what I'm saying is the one would fall
 13:57:14 **9** within the group of ten, so it would be
 13:57:16 **10** representative.
 13:57:17 **11** **Q.** I'm not asking questions about
 13:57:18 **12** representative in any way whatsoever.
 13:57:20 **13** **A.** I know. I'm trying to answer from a
 13:57:21 **14** scientific point of view.
 13:57:23 **15** **Q.** Yeah. So if you want to be a scientist
 13:57:25 **16** about it, I would appreciate you under -- like,
 13:57:27 **17** listen to the words I'm saying, okay? I'm talking
 13:57:29 **18** about the standard deviations, not what's
 13:57:32 **19** representative, just the math of standard deviations.
 13:57:34 **20** **A.** Well, there's no --
 13:57:34 **21** MS. O'DELL: Object --
 13:57:36 **22** THE WITNESS: -- no standard deviation in
 13:57:38 **23** one. So you're trying to compare ten to one and
 13:57:41 **24** say standard deviation, and it's not working.
 13:57:43 **25** **Q.** (By Mr. Chachkes) Okay. How about
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13:57:43 **1** comparing two averaged and 100 averaged --
 13:57:46 **2 A.** Well, now all of a sudden now we're at two
 13:57:51 **3** and ten instead of one and ten.
 13:57:53 **4 Q.** 100.
 13:57:54 **5 A.** Or 100. Yeah, no, I'm talking about you
 13:57:55 **6** want to know about one, and I'm telling you one is
 13:57:57 **7** representative. That's my opinion.
 13:57:58 **8 Q.** Just asking about standard deviations. Is
 13:58:01 **9** it possible to talk about the math of standard
10 deviations without saying the word representative?
11 MS. O'DELL: Object to the form.
12 THE REPORTER: Wait. I'm sorry, say it
13 again, please.
 13:58:07 **14 Q.** (By Mr. Chachkes) Is it possible to talk
 13:58:08 **15** about the math of standard deviations without using
 13:58:11 **16** the word representative?
 13:58:12 **17** MS. O'DELL: Object to the form.
 13:58:13 **18** THE WITNESS: I'm not quite sure what
 13:58:18 **19** you're getting at.
 13:58:18 **20 Q.** (By Mr. Chachkes) Okay. Every time I ask
 13:58:21 **21** you about standard deviations, you say
 13:58:23 **22** representative. I'm just talking about the math. Do
 13:58:25 **23** you understand that?
 13:58:26 **24 A.** Yeah, but --
 13:58:26 **25** MS. O'DELL: Object to the form.
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13:59:10 **1 Q.** This is a new, independent question.
 13:59:12 **2 A.** Okay.
 13:59:12 **3 Q.** And --
 13:59:13 **4 A.** New question.
 13:59:14 **5 Q.** You've got two samples from one -- a
 13:59:19 **6** bottle?
 13:59:19 **7 A.** Yes.
 13:59:19 **8 Q.** Separately analyzed?
 13:59:21 **9 A.** Okay.
 13:59:21 **10 Q.** Average them on one hand?
 13:59:23 **11 A.** Yes.
 13:59:23 **12 Q.** You've got 100 samples from that same
 13:59:25 **13** bottle average -- and separately analyze those and
 13:59:28 **14** average them, which is going to have a higher
 13:59:31 **15** standard deviation?
 13:59:33 **16** MS. O'DELL: Object to the form.
 13:59:34 **17** THE WITNESS: I can't tell you that.
 13:59:35 **18 Q.** (By Mr. Chachkes) Okay. Why can't you
 13:59:36 **19** tell me that?
 13:59:36 **20 A.** Because I don't have the numbers. I don't
 13:59:39 **21** have any numbers to work with.
 13:59:40 **22 Q.** In what world is this hypothetical such
 13:59:44 **23** that the standard deviation is smaller for the two on
 13:59:48 **24** average than the 100 on average?
 13:59:49 **25** MS. O'DELL: Object to the form.
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13:58:27 **1** THE WITNESS: -- I mean as far as -- I
 13:58:31 **2** mean, if you read back some of what I said, how
 13:58:34 **3** many times did I say representative with that?
 13:58:36 **4** Was it quite a few?
 13:58:37 **5 Q.** (By Mr. Chachkes) It's a bit of a burden
 13:58:39 **6** to put on the reporter.
 13:58:40 **7 A.** I know, but I'm like I don't recall it
 13:58:41 **8** being so much a part of the standard deviation, you
 13:58:44 **9** know, answer.
 13:58:45 **10 Q.** Okay. Let me see if you can answer this
 13:58:46 **11** question without using the words representative or
 13:58:49 **12** what's regulatory or -- just about a question about
 13:58:52 **13** standard deviation. Listen to the question.
 13:58:54 **14** MS. O'DELL: You may answer it any way you
 13:58:56 **15** choose.
 13:58:56 **16** THE WITNESS: I know. I mean, when I say
 13:58:59 **17** representative, I'm talking about that sample
 13:59:01 **18** being representative of the bottle.
 13:59:03 **19 Q.** (By Mr. Chachkes) Okay.
 13:59:04 **20 A.** That's what I'm talking about
 13:59:05 **21** representative. I didn't say it was representative
 13:59:07 **22** about standard deviation.
23 Q. Okay.
 13:59:08 **24 A.** I said it's representative of what is in
 13:59:09 **25** the bottle.
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13:59:50 **1** THE WITNESS: It could be the same.
 13:59:53 **2** Standard deviation could be exactly the same.
 13:59:54 **3 Q.** (By Mr. Chachkes) Okay. Is there any
 13:59:55 **4** situation where the two is going to have a lower
 13:59:57 **5** deviation?
 13:59:57 **6 A.** A lower standard deviation?
 13:59:59 **7 Q.** Right.
 14:00:00 **8 A.** The two have a lower standard deviation?
 14:00:07 **9 Q.** Right.
 14:00:07 **10 A.** Possibly.
11 Q. How?
 14:00:07 **12 A.** Well, it depends on how close the results
 14:00:09 **13** are. The closer they are, the smaller the standard
 14:00:11 **14** deviation.
 14:00:11 **15 Q.** Okay. That's your opinion of how standard
 14:00:13 **16** deviation is calculated?
 14:00:15 **17** MS. O'DELL: Object to the form.
 14:00:15 **18** THE WITNESS: We didn't talk about how
 14:00:17 **19** it's calculated. There's a formula for that.
20 Q. (By Mr. Chachkes) Okay.
 14:00:19 **21 A.** Okay. But the closer the values are to
 14:00:25 **22** each other, the smaller the standard deviation's
 14:00:29 **23** going to be.
 14:00:29 **24 Q.** Did your analysts use the point counting
 14:00:32 **25** method?
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14:00:32 **1** **A.** Are we back to PLM?
 14:00:34 **2** **Q.** Well, there's a point counting method for
 14:00:37 **3** PLM and SEM.
 14:00:38 **4** **A.** Yeah.
 14:00:38 **5** **Q.** So you don't do SEM, right?
 14:00:39 **6** **A.** No.
 14:00:40 **7** **Q.** Okay. All right. I'm going to skip that.
 14:00:42 **8** **A.** No. No. No. Yep, okay.
 14:00:43 **9** **Q.** I'll skip that, that's fine.
 14:00:49 **10** So let's talk about the coefficient of
 14:00:50 **11** variation study. I'm just going to give it to you.
 14:00:52 **12** **A.** Okay.
 14:00:53 **13** **Q.** We will mark it as an exhibit. What's the
 14:00:56 **14** next exhibit? She has to mark it.
15 **A.** Yep.
16 (Defendants' Exhibit 3 was marked for
 14:01:22 **17** identification.)
 14:01:22 **18** **Q.** (By Mr. Chachkes) All right. So is this
 14:01:26 **19** the coefficient of variation study that you referred
 14:01:29 **20** to earlier?
 14:01:30 **21** **A.** Yes.
 14:01:42 **22** **Q.** And that's where you got that 5 to 7
 14:01:45 **23** percent deviation number from?
 14:01:46 **24** **A.** Yes.
 14:01:46 **25** **Q.** Is there a right answer and a wrong answer
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14:01:51 **1** as to whether someone you're looking at visually
 14:01:54 **2** under TEM is a fiber or bundle?
 14:01:56 **3** **MS. O'DELL:** Object to the form.
 14:01:57 **4** **THE WITNESS:** Is a fiber or a bundle a
 14:02:02 **5** right answer or a wrong answer? I would say
 14:02:04 **6** yes.
 14:02:05 **7** **Q.** (By Mr. Chachkes) So is the coefficient
 14:02:10 **8** of variation also -- can we also refer to it as an
 14:02:13 **9** error rate? Is that the same thing?
 14:02:14 **10** **A.** Yes.
 14:02:14 **11** **Q.** And for this coefficient of variation you
 14:02:18 **12** bought off-the-shelf J&J baby powder and added a
 14:02:22 **13** known tremolite asbestos and anthophyllite asbestos
 14:02:24 **14** standard reference material?
 14:02:26 **15** **A.** Yes.
 14:02:27 **16** **Q.** And you spiked the J&J baby powder with
 14:02:31 **17** enough asbestos to reach a concentration of about
 14:02:33 **18** .3 percent?
 14:02:33 **19** **A.** Yes.
 14:02:34 **20** **Q.** And the highest concentration of any
 14:02:35 **21** bottle that you've tested in this case is
 14:02:38 **22** .035 percent; correct?
 14:02:42 **23** **MS. O'DELL:** Object to the form.
 14:02:43 **24** **THE WITNESS:** I would have to check and
 14:02:44 **25** see.
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14:02:44 **1** **Q.** (By Mr. Chachkes) Okay. Do you have --
 14:02:44 **2** just sitting here today, without referring to the
 14:02:46 **3** report, do you have an idea of what the highest
 14:02:48 **4** concentration of any bottle of MDL samples that you
 14:02:51 **5** tested is?
 14:02:52 **6** **MS. O'DELL:** Object to the form.
 14:02:53 **7** **THE WITNESS:** Again, I can't remember off
 14:02:54 **8** the top of my head right now, yeah.
 14:02:55 **9** **Q.** (By Mr. Chachkes) That's fine. It's not
 14:02:57 **10** a memory test.
11 **A.** Yep.
 14:02:58 **12** **Q.** For the coefficient of variation you
 14:03:00 **13** prepared 25 grid openings; correct?
 14:03:02 **14** **A.** Yes.
 14:03:02 **15** **Q.** And then you had four TEM analysts look at
 14:03:06 **16** the exact same grids and analyze them for tremolite
 14:03:09 **17** and anthophyllite asbestos; correct?
 14:03:10 **18** **A.** Yes. Yes.
 14:03:11 **19** **Q.** And so those four analysts were looking at
 14:03:13 **20** the exact same thing?
 14:03:14 **21** **A.** Yes.
 14:03:14 **22** **Q.** And these are the analysts who did the
 14:03:19 **23** testing of the MDL samples?
 14:03:21 **24** **A.** To my knowledge, yes.
 14:03:22 **25** **Q.** Do you consider the error rate that is
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14:03:28 **1** your conclusion in the coefficient of variation study
 14:03:31 **2** to be a good one for a lab?
 14:03:33 **3** **A.** Yes.
 14:03:33 **4** **Q.** Looking specifically at the count sheets
 14:03:37 **5** for tremolite, two of the analysts found nine
 14:03:42 **6** structures in the sample and two found ten
 14:03:44 **7** structures; correct?
 14:03:45 **8** **A.** Yes.
 14:03:45 **9** **Q.** And that's the 6 percent error rate you
 14:03:49 **10** were talking about, the roughly 6 percent error rate?
 14:03:51 **11** **MS. O'DELL:** Object to the form.
 14:03:52 **12** **THE WITNESS:** That's part of the way it's
 14:03:54 **13** calculated, yes.
 14:03:55 **14** **Q.** (By Mr. Chachkes) Okay. What other ways
 14:03:58 **15** was it calculated?
 14:03:59 **16** **A.** That's the way it was calculated according
 14:04:01 **17** to the formula we used.
 14:04:02 **18** **Q.** Okay.
 14:04:03 **19** **A.** Yep.
 14:04:03 **20** **Q.** Your analysts wrote down whether the
 14:04:08 **21** structure they found was a fiber or bundle; right?
 14:04:10 **22** **A.** Yes.
 14:04:11 **23** **Q.** This is a part of the study parameters;
 14:04:17 **24** right?
25 **A.** Yes.
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14:04:17 **1** Q. Let me --
 14:04:22 **2** A. I mean, the rate is based on the number of
 14:04:24 **3** structures that they counted. Now, they may have
 14:04:26 **4** been a fiber or a bundle, but it's the total number
 14:04:29 **5** of structures they counted. Yep.
 14:04:31 **6** MR. CHACHKES: Let's mark as the next
 14:04:32 **7** exhibit, what are we on, 4?
8 (Defendants' Exhibit 4 was marked for
 14:04:52 **9** identification.)
 14:04:52 **10** Q. (By Mr. Chachkes) So what we have marked
 14:04:55 **11** as Rigler 4 is a demonstrative we worked up so that
 14:04:57 **12** we can see -- compare the analysts' work against each
 14:04:59 **13** other.
 14:05:00 **14** Can you just confirm that -- let's look,
 14:05:03 **15** for example, at analyst 1, what they found for grid
 14:05:10 **16** opening A8-E2?
 14:05:16 **17** A. Which analysis is this? Which sample is
 14:05:17 **18** this?
 14:05:18 **19** Q. So this is -- you've gone to the appendix,
 14:05:21 **20** right, of Rigler 3.
 14:05:26 **21** A. What? Where are we --
 14:05:29 **22** Q. So Rigler 3 is the coefficient of
 14:05:32 **23** variation study?
 14:05:33 **24** A. Okay.
 14:05:33 **25** Q. And if you go into -- there are sheets for
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14:05:38 **1** different analysts; right?
 14:05:39 **2** A. Yeah, these are the count sheets, right.
 14:05:41 **3** Q. Right. So if you go to the first analyst
 14:05:48 **4** and you go to A8-E2 --
 14:05:51 **5** A. Okay.
 14:05:51 **6** Q. -- you see that the structure identified
 14:05:53 **7** was a bundle --
 14:05:54 **8** A. Okay.
 14:05:54 **9** Q. -- right?
 14:05:55 **10** A. Yes.
 14:05:56 **11** Q. Okay. And then in my demonstrative you
 14:05:58 **12** see that's a bundle; right?
 14:06:00 **13** A. Right.
 14:06:00 **14** Q. And then you go to analyst number 2 -- is
 14:06:06 **15** that the second page?
 14:06:07 **16** A. Yes.
 14:06:07 **17** Q. Okay. And it says in the upper left-hand
 14:06:09 **18** corner analyst 2?
 14:06:10 **19** A. Yes.
 14:06:10 **20** Q. Okay. That for A8-E2 that analyst
 14:06:16 **21** identified a fiber?
 14:06:17 **22** A. Okay.
 14:06:17 **23** Q. Is that correct?
 14:06:18 **24** A. Uh-huh.
 14:06:19 **25** Q. Okay. And that's reflected in the
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14:06:21 **1** demonstrative?
 14:06:22 **2** A. Yep.
 14:06:22 **3** Q. And analyst number 3, A8-E2, that analyst
 14:06:27 **4** detected a fiber?
 14:06:28 **5** A. Yes.
 14:06:29 **6** Q. Okay. And then analyst number 4, A8-E2,
 14:06:34 **7** that analyst detected a bundle?
 14:06:36 **8** A. Yes. Yep.
 14:06:37 **9** MS. O'DELL: Did you say A8-2 twice?
10 THE WITNESS: This one.
 14:06:41 **11** MR. CHACHKES: A8-E2.
 14:06:43 **12** THE WITNESS: Yeah. Is that grid square?
 14:06:44 **13** MS. O'DELL: Yeah.
14 THE WITNESS: Yeah.
 14:06:45 **15** MS. O'DELL: Got it. And then for --
 14:06:49 **16** Q. (By Mr. Chachkes) Okay. So what we've
 14:06:51 **17** done is we've summarized these grid openings in this
 14:06:55 **18** demonstrative in that way --
19 A. Right.
 14:06:56 **20** Q. -- do you follow me so far?
 14:06:58 **21** A. Yes.
 14:06:58 **22** Q. And your analysts are trained to
 14:07:00 **23** distinguish between a fiber and a bundle; right?
 14:07:02 **24** A. Yes.
 14:07:02 **25** Q. And you ran this experiment to detect how
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14:07:06 **1** good your analysts were at identifying the same
 14:07:09 **2** thing?
 14:07:09 **3** MS. O'DELL: Object to the form.
 14:07:10 **4** Q. (By Mr. Chachkes) Is that a yes?
 14:07:11 **5** A. That would be yes.
 14:07:11 **6** Q. But out of the 11 grid openings, your
 14:07:14 **7** analysts only came to consensus on the type of
 14:07:16 **8** structure they found only once?
 14:07:18 **9** MS. O'DELL: Object to the form.
 14:07:19 **10** THE WITNESS: Every time they came to the
 14:07:20 **11** consensus that it was tremolite.
 14:07:22 **12** Q. (By Mr. Chachkes) This is not the
 14:07:23 **13** question.
 14:07:23 **14** A. But that is the answer. This is what
 14:07:25 **15** we're concerned about here, is it asbestos.
 14:07:27 **16** Q. The question before you is: Out of 11
 14:07:30 **17** grid openings your analysts only came to a consensus
 14:07:33 **18** on the type of structure they found only once?
 14:07:36 **19** A. What's that? Out of 11 grid openings?
 14:07:39 **20** Q. Right.
 14:07:40 **21** A. No.
 14:07:40 **22** Q. Okay. Look at the demonstrative.
23 A. Okay.
 14:07:43 **24** Q. For A8-E2 your analysts did not find the
 14:07:46 **25** same structure; right? Two found bundle, two found
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14:07:52 **1** fiber?
 14:07:52 **2** **A.** Uh-huh.
 14:07:53 **3** **Q.** For A8-E4 they all agree it's a fiber?
 14:07:57 **4** **A.** Uh-huh.
 14:07:57 **5** **Q.** For A8-E5 they did not agree whether it
 14:08:00 **6** was a bundle or fiber.
 14:08:02 **7** **A.** Okay.
 14:08:03 **8** MS. O'DELL: And feel free to check if you
 14:08:05 **9** need to check the data. It's in the
 14:08:08 **10** demonstrative.
 14:08:08 **11** **Q.** (By Mr. Chachkes) Yeah. I mean, if you
 14:08:09 **12** think we're putting a fraudulent --
13 **A.** No --
14 **Q.** -- in front of you --
 14:08:13 **15** **A.** -- no.
 14:08:13 **16** MS. O'DELL: I think mistakes can happen.
17 THE WITNESS: I'm sure they can.
 14:08:15 **18** MS. O'DELL: I think probably the others
 14:08:16 **19** happen, too, but I'm not suggesting that in this
 14:08:18 **20** situation.
 14:08:18 **21** **Q.** (By Mr. Chachkes) So you can see for the
 14:08:20 **22** 11 grid openings on the demonstrative we put before
 14:08:23 **23** you, there was only one instance where the analysts
 14:08:27 **24** agreed on the fiber structure.
 14:08:30 **25** **A.** Okay.
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14:08:31 **1** **Q.** Right?
 14:08:32 **2** **A.** Okay.
 14:08:32 **3** **Q.** And did you -- did you determine an error
 14:08:39 **4** rate for your analysts' ability to determine
 14:08:42 **5** morphology?
 14:08:43 **6** **A.** No.
 14:08:44 **7** **Q.** If you did based on this, it would be a
 14:08:47 **8** pretty high error rate, wouldn't it?
 14:08:49 **9** MS. O'DELL: Object to the form.
 14:08:50 **10** THE WITNESS: Well, it's not an error as
 14:08:51 **11** to what the material is, is it? It's all
 14:08:53 **12** tremolite. It's all tremolite asbestos. It all
 14:08:56 **13** meets the definition for tremolite asbestos,
 14:08:57 **14** bundle, fiber.
 14:08:59 **15** **Q.** (By Mr. Chachkes) I'll ask the question
 14:09:00 **16** again.
 14:09:00 **17** **A.** Okay.
 14:09:00 **18** **Q.** If you were to determine an error rate for
 14:09:03 **19** determining the morphology of what the analysts in
 14:09:06 **20** the coefficient of variation were looking at, it
 14:09:09 **21** would be a very high error rate, wouldn't it?
 14:09:11 **22** MS. O'DELL: Object to the form.
 14:09:12 **23** THE WITNESS: No. No, it wouldn't.
 14:09:12 **24** **Q.** (By Mr. Chachkes) Even though they only
 14:09:13 **25** agreed once out of 11 times?
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14:09:15 **1** MS. O'DELL: Object to the form.
 14:09:16 **2** THE WITNESS: No.
 14:09:16 **3** **Q.** (By Mr. Chachkes) Why?
 14:09:17 **4** **A.** It's not.
 14:09:18 **5** **Q.** Why?
 14:09:18 **6** **A.** Well, the max I can see here is it might
 14:09:23 **7** be -- it might be maybe 50 percent, maybe, if that's
 14:09:28 **8** what it is.
 14:09:28 **9** **Q.** Okay.
 14:09:29 **10** **A.** And I don't agree with it, okay, because
 14:09:32 **11** the objective here is is it asbestos? Is it
 14:09:35 **12** asbestiform asbestos? The answer is yes.
 14:09:37 **13** **Q.** So a 50 percent error rate in your mind is
 14:09:39 **14** not high?
 14:09:40 **15** MS. O'DELL: Object to the form.
 14:09:41 **16** THE WITNESS: No, this is not --
 14:09:43 **17** MS. O'DELL: Give me a moment.
 14:09:45 **18** Object to the form.
 14:09:46 **19** Go ahead.
 14:09:46 **20** THE WITNESS: I mean, again, the objective
 14:09:48 **21** here is to determine if this is asbestos, is
 14:09:51 **22** this asbestiform. And the answer to that is
 14:09:54 **23** yes. You're going to have some variation based
 14:09:56 **24** on what they see in the microscope, all right,
 14:10:01 **25** and that is totally acceptable.
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14:10:03 **1** **Q.** (By Mr. Chachkes) Okay. When you say
 14:10:05 **2** totally acceptable, what do you mean by that?
 14:10:06 **3** **A.** Well, it's acceptable based on what the
 14:10:13 **4** asbestiform is, according to the definition. All
 14:10:16 **5** right. Fiber, bundle, .5 or greater, 5-to-1 aspect
 14:10:22 **6** ratio. Every one of these fits that.
 14:10:24 **7** **Q.** So -- well, that's not quite correct;
 14:10:28 **8** right? A8-G4, three analysts found no detectable
 14:10:34 **9** asbestos and only one found asbestos; right?
 14:10:36 **10** **A.** That happens.
11 **Q.** Okay.
 14:10:36 **12** **A.** That can happen.
 14:10:37 **13** **Q.** And then A8-G5, three analysts found no
 14:10:41 **14** asbestos and one identified a bundle?
 14:10:43 **15** **A.** Again, that can happen.
 14:10:45 **16** **Q.** And you testified before that there's a
 14:10:49 **17** right answer and a wrong answer as to whether
 14:10:52 **18** something's a fiber or a bundle; right?
 14:10:54 **19** **A.** Yes.
 14:10:54 **20** **Q.** Do you know for grid opening A8-E4 which
 14:10:59 **21** analyst got it wrong and which analyst got it right?
 14:11:01 **22** MS. O'DELL: Object to the form.
 14:11:02 **23** THE WITNESS: They both got it right.
 14:11:04 **24** They all got it right.
 14:11:05 **25** **Q.** (By Mr. Chachkes) Okay. And so if
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14:11:08 **1** there's objectively a right answer to whether it's a
 14:11:11 **2** fiber or bundle, how can something be both a fiber
 14:11:14 **3** and a bundle?
 14:11:15 **4** **A.** As I say, the analyst, their job is to
 14:11:22 **5** figure out whether it meets the definition, all
 14:11:24 **6** right? Fiber or bundle, it meets the specification
 14:11:28 **7** for whether it is asbestos, asbestiform asbestos.
 14:11:33 **8** **Q.** Okay. Putting --
 14:11:34 **9** **A.** That's what we're concerned about here.
 14:11:36 **10** **Q.** Putting aside whether there's -- what they
 14:11:38 **11** identified as asbestiform, I'm just talking about the
 14:11:41 **12** morphology.
 14:11:41 **13** **A.** Sure.
 14:11:42 **14** **Q.** For A8-E2, two analysts must have gotten
 14:11:46 **15** it wrong and two must have gotten it right.
 14:11:48 **16** **MS. O'DELL:** Object to the form.
 14:11:49 **17** **THE WITNESS:** No. They all got it right.
 14:11:50 **18** **Q.** (By Mr. Chachkes) Okay. So you don't
 14:11:50 **19** care whether an analyst correctly identifies
 14:11:54 **20** something as a bundle or fiber?
 14:11:56 **21** **MS. O'DELL:** Object to the form.
 14:11:56 **22** **MS. PARFITT:** Misstates his testimony.
 14:11:59 **23** **THE WITNESS:** What I've said is it meets
 14:12:00 **24** the definition. That's what is of concern to
 14:12:03 **25** me. That's the most important part.
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14:12:39 **1** your question.
 14:12:39 **2** **THE WITNESS:** Numerous times.
 14:12:41 **3** **MS. O'DELL:** Excuse me. Three or four
 14:12:42 **4** times. If you want to waste your time, but
 14:12:45 **5** don't badger the witness.
 14:12:46 **6** **MR. CHACHKES:** I'm not going to badger the
 14:12:50 **7** witness --
 14:12:50 **8** **MS. O'DELL:** You are badgering the
 14:12:50 **9** witness.
 14:12:50 **10** **MR. CHACHKES:** -- clear answer.
 14:12:50 **11** **MS. O'DELL:** He's answered your question
 14:12:51 **12** very clearly.
 14:12:52 **13** **MR. CHACHKES:** I'm going to ask the same
 14:12:53 **14** question again. You can tell me I'm not allowed
 14:12:56 **15** to, and I'll move on.
 14:12:56 **16** **MS. O'DELL:** I'm telling you that the
 14:12:56 **17** rules require that you not badger the witness.
 14:12:56 **18** That's what I'm stating to you.
 14:13:01 **19** **MR. CHACHKES:** I'm -- level voice. It's a
 14:13:02 **20** calm question. It's a serious question. So.
 14:13:04 **21** **MS. O'DELL:** That doesn't mean you're not
 14:13:08 **22** badgering the witness, as you are well aware.
 14:13:09 **23** **MR. CHACHKES:** I believe I'm entitled to a
 14:13:11 **24** clear answer to a clear question.
 14:13:13 **25** **MS. O'DELL:** You're not entitled to the
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14:12:04 **1** **Q.** (By Mr. Chachkes) The question is do you
 14:12:06 **2** care whether one of your analysts misidentifies a
 14:12:09 **3** bundle as a fiber or a fiber as a bundle?
 14:12:11 **4** **MS. O'DELL:** Object to the form.
 14:12:13 **5** **Q.** (By Mr. Chachkes) Do you care?
 14:12:14 **6** **MS. O'DELL:** Object to the form.
 14:12:15 **7** **THE WITNESS:** I care if they identify it
 14:12:19 **8** properly according to the regulations, and in
 14:12:22 **9** all cases they have.
 14:12:23 **10** **Q.** (By Mr. Chachkes) I'll ask the same
 14:12:24 **11** question again.
 14:12:24 **12** **A.** And I'll answer it the same way every
 14:12:26 **13** time.
 14:12:26 **14** **Q.** We'll add this to the list of things we're
 14:12:28 **15** going to get the magistrate to --
 14:12:28 **16** **A.** Fine.
 14:12:30 **17** **Q.** -- answer.
 14:12:30 **18** **A.** That's fine.
 14:12:30 **19** **Q.** Do you care --
 14:12:31 **20** **A.** I'm going to answer it the same way, so we
 14:12:33 **21** can move on.
 14:12:34 **22** **Q.** I want a clear record. If you don't want
 14:12:36 **23** to answer -- do you care --
 14:12:37 **24** **A.** I've answered already.
 14:12:37 **25** **MS. O'DELL:** Excuse me. He's answered
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14:13:13 **1** answer that you want. You're entitled to an
 14:13:13 **2** answer, and he's answered your question.
 14:13:13 **3** **MR. CHACHKES:** Let's maybe -- I don't
 14:13:13 **4** think this colloquy is productive. I'm going to
 14:13:19 **5** ask the same question again. If you want to say
 14:13:19 **6** don't ask it, you can order me not to ask it.
 14:13:22 **7** I'm going to ask it again.
 14:13:23 **8** **Q.** (By Mr. Chachkes) Do you care whether
 14:13:24 **9** your analysts misidentify a bundle as a fiber or a
 14:13:28 **10** fiber as a bundle? Just the morphology I'm talking
 14:13:30 **11** about.
 14:13:31 **12** **A.** Asked and answered.
 14:13:32 **13** **MS. O'DELL:** Excuse me. Object to the
 14:13:33 **14** form.
 14:13:34 **15** **Q.** (By Mr. Chachkes) So you believe you've
 14:13:37 **16** already answered that?
 14:13:37 **17** **A.** Yes.
 14:13:38 **18** **Q.** Okay. And if I were to say you don't care
 14:13:41 **19** about whether an analyst is misidentifying a
 14:13:44 **20** morphology, would I be wrong or right?
 14:13:46 **21** **MS. O'DELL:** You would be misstating his
 14:13:48 **22** testimony. Object to the question.
 14:13:49 **23** **Q.** (By Mr. Chachkes) If I said you do care
 14:13:52 **24** that an analyst misidentified the morphology of
 14:13:56 **25** asbestos, would I be wrong or right?
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14:13:57 **1** MS. O'DELL: Object to the form. He's
 14:13:59 **2** answered your question.
 14:13:59 **3** THE WITNESS: I've already answered the
 14:14:01 **4** question.
 14:14:01 **5** MR. CHACHKES: Okay. We're going to add
 14:14:03 **6** that to the list of questions for the
 14:14:04 **7** magistrate.
 14:14:09 **8** Q. (By Mr. Chachkes) Does whether you
 14:14:12 **9** identify something as a bundle or a fiber affect the
 14:14:15 **10** concentration values in your report?
 14:14:19 **11** A. No.
 14:14:19 **12** Q. Not at all?
 14:14:24 **13** A. No.
 14:14:24 **14** Q. Does the Rigler 4 demonstrative which is
 14:14:32 **15** derived from your coefficient of variation study lead
 14:14:36 **16** you to believe that maybe the TEM is not the best
 14:14:39 **17** apparatus for resolving morphology?
 14:14:41 **18** A. No.
 14:14:42 **19** MS. O'DELL: Object to the form.
 14:14:43 **20** THE WITNESS: It is the best.
 14:14:45 **21** Q. (By Mr. Chachkes) No evidence will shake
 14:14:46 **22** you from that opinion?
 14:14:47 **23** A. No.
 14:14:47 **24** Q. Okay. Let's talk about asbestos. Ready?
 14:14:56 **25** A. I thought that's what we've been talking
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14:14:58 **1** about.
 14:14:58 **2** Q. Completely different topic.
 14:14:59 **3** A. All right.
 14:15:00 **4** Q. You talk about the Blount paper in your
 14:15:02 **5** expert report; correct?
 14:15:04 **6** A. Yes.
 14:15:04 **7** Q. Okay. In the Blount paper there's a
 14:15:06 **8** particle size distribution?
 14:15:09 **9** A. Yes.
 14:15:09 **10** Q. Okay. And out in the published literature
 14:15:16 **11** there are publications that have particle sized
 14:15:21 **12** distributions that -- strike that.
 14:15:25 **13** That there's a characteristic -- there is
 14:15:27 **14** a characteristic particle size distribution for
 14:15:30 **15** asbestos; is that correct?
 14:15:31 **16** A. Well, depending on how that sample's been
 14:15:43 **17** processed, you're going to have different fiber
 14:15:45 **18** sizes, different -- they're going to be different.
 14:15:48 **19** You're going to have different aspect ratios and
 14:15:51 **20** different sizes.
 14:15:51 **21** Q. For any given sample that everyone agrees
 14:15:56 **22** is asbestos, it's going to have a characteristic
 14:15:59 **23** particle size distribution; right?
 14:16:00 **24** MS. O'DELL: Object to the form.
 14:16:01 **25** THE WITNESS: It can.
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14:16:02 **1** Q. (By Mr. Chachkes) Okay. Meaning some
 14:16:06 **2** of -- strike that.
 14:16:06 **3** Does a -- you understand what a cleavage
 14:16:10 **4** fragment is?
 14:16:11 **5** A. Yes.
 14:16:11 **6** Q. Would you call a cleavage fragment
 14:16:13 **7** asbestos?
 14:16:13 **8** A. If it was of the size and shape that met
 14:16:16 **9** the regulatory definition, yes.
 14:16:18 **10** Q. Do cleavage fragments have a different
 14:16:21 **11** particle size distribution than asbestos?
 14:16:26 **12** MS. O'DELL: Object on the form.
 14:16:27 **13** THE WITNESS: They can.
 14:16:29 **14** Q. (By Mr. Chachkes) Okay. Using -- when I
 14:16:31 **15** say geological definition, I've heard you guys talk
 14:16:34 **16** about --
 14:16:34 **17** A. Yes.
 14:16:34 **18** Q. -- I'm going to use your phrase geological
 14:16:37 **19** definition of asbestos.
 14:16:39 **20** A. All right.
 14:16:39 **21** Q. Using a geological definition of asbestos,
 14:16:42 **22** can you have a cleavage fragment that is greater than
 14:16:46 **23** 5-to-1 aspect ratio?
 14:16:48 **24** MS. O'DELL: Object to the form.
 14:16:49 **25** THE WITNESS: In my opinion, the answer to
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14:16:52 **1** that is yes.
 14:16:53 **2** Q. (By Mr. Chachkes) Okay. And using the
 14:16:56 **3** geological definition of asbestos as you have used
 14:17:02 **4** it, there can be an asbestiform particle that has an
 14:17:06 **5** aspect ratio of below 3-to-1?
 14:17:08 **6** MS. O'DELL: Object to the form.
 14:17:10 **7** THE WITNESS: Are you talking about what
 14:17:13 **8** kind of particle?
 14:17:14 **9** Q. (By Mr. Chachkes) Asbestiform particle.
 14:17:15 **10** A. Smaller than 3-to-1?
 14:17:17 **11** Q. Yeah.
 14:17:17 **12** A. I mean, from a regulatory standpoint, it
 14:17:22 **13** would be 3-to-1, 5-to-1. So --
 14:17:27 **14** Q. Yeah. I don't want to interrupt.
 14:17:29 **15** So for just a geological definition as
 14:17:31 **16** you've -- as --
 14:17:34 **17** A. Yeah.
 14:17:34 **18** Q. It's just a geological definition as you
 14:17:39 **19** have used that phrase, can there be, under the
 14:17:42 **20** geological definition, asbestos with an aspect ratio
 14:17:45 **21** below 3-to-1?
 14:17:46 **22** MS. O'DELL: Object to the form.
 14:17:47 **23** THE WITNESS: Well, the geological
 14:17:51 **24** definition that we've talked about has to do
 14:17:54 **25** with macro, large, very large that you can hold
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14:17:58 **1** in your hand kinds of particles. So in most
 14:18:03 **2** cases of that size, you know, you may see some
 14:18:08 **3** that are in that range, but you have to use the
 14:18:09 **4** PLM to see them, probably.
 14:18:11 **5** **Q.** (By Mr. Chachkes) Okay. If I took, under
 14:18:14 **6** the geological definition, a tremolite particle that
 14:18:17 **7** had a 6-to-1 aspect ratio and I snapped it into two
 14:18:21 **8** 3-to-1 aspect ratio particles, under the geological
 14:18:24 **9** definition those two particles would still be
 14:18:27 **10** asbestos; right?
 14:18:28 **11** **A.** Yes. I mean, if they were -- yeah. They
 14:18:32 **12** were on a -- yes, they would be.
 14:18:34 **13** **Q.** Let me ask it --
 14:18:35 **14** **A.** If they were equally divided.
 14:18:36 **15** **Q.** Yeah. Let me just ask a better question
 14:18:38 **16** to be fair.
 14:18:39 **17** If I had a tremolite particle that was --
 14:18:42 **18** that had a 6-to-1 aspect ratio and I snapped it into
 14:18:46 **19** three parts perfectly evenly so that each had a
 14:18:50 **20** 2-to-1 aspect ratio, under the geological definition
 14:18:53 **21** each of those would still be asbestos; right?
 14:18:54 **22** **MS. O'DELL:** Object to the form.
 14:18:56 **23** **THE WITNESS:** On a microscopic scale they
 14:18:58 **24** wouldn't be. I mean, they wouldn't fit the
 14:19:00 **25** regulatory definition.
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14:19:00 **1** **Q.** (By Mr. Chachkes) I'm talking about the
 14:19:01 **2** geological.
 14:19:02 **3** **A.** I mean --
 14:19:08 **4** **MS. O'DELL:** Object to the form.
 14:19:09 **5** **THE WITNESS:** Yeah, I don't -- I mean, I
 14:19:11 **6** think on a microscale versus, you know, what I
 14:19:14 **7** can see in my hand. See what I'm saying?
 14:19:17 **8** **Q.** (By Mr. Chachkes) No.
 14:19:18 **9** **A.** Yeah. Well, that's how I feel about the
 14:19:22 **10** question you just asked me. I'm not quite sure of
 14:19:24 **11** exactly -- I mean, I understand what the concept is,
 14:19:28 **12** but when you're saying on a geological scale, I mean,
 14:19:32 **13** if the aspect ratio is less than 3-to-1, it wouldn't
 14:19:35 **14** come under the regulatory definition.
 14:19:37 **15** **Q.** Right. But I'm not asking about
 14:19:38 **16** regulatory.
 14:19:39 **17** **A.** Well, that's where I am with it.
 14:19:41 **18** **Q.** Right.
 14:19:43 **19** **A.** I mean, if you're going to say it's
 14:19:45 **20** asbestiform, it's got to have that ratio. It's got
 14:19:50 **21** to have at least a 5-to-1 ratio.
 14:19:52 **22** **Q.** So if I have a chunk of gold and I break
 14:19:54 **23** it in half, each half would still be gold; right?
 14:19:57 **24** **A.** Yeah.
 14:19:57 **25** **Q.** If I break those two halves again, each
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14:20:00 **1** part would still be gold?
 14:20:01 **2** **A.** Correct.
 14:20:01 **3** **Q.** And I can keep going doing that until I
 14:20:05 **4** had very small pieces and they still would be gold?
 14:20:07 **5** **A.** Sure.
 14:20:08 **6** **Q.** You're saying the same does not apply to
 14:20:10 **7** asbestos, that I could break asbestos and at a
 14:20:10 **8** certain point it's not asbestos?
 14:20:11 **9** **MS. O'DELL:** Object to the form.
 14:20:12 **10** **THE WITNESS:** Well, I mean, chemically it
 14:20:15 **11** still is. Yes.
 14:20:17 **12** **Q.** (By Mr. Chachkes) Okay. You use -- so I
 14:20:26 **13** didn't see the phrase asbestiform talc in your
 14:20:28 **14** report; is that correct?
 14:20:30 **15** **A.** I don't -- it might be in there, yeah, I
 14:20:33 **16** think it is. Yeah.
 14:20:34 **17** **Q.** Okay. In your report at page 8 you talk
 14:20:37 **18** about fibrous talc, you found fibrous talc in
 14:20:42 **19** 98 percent of the Italian and Vermont talc samples by
 14:20:45 **20** ISO 22262. Does that ring a bell?
 14:20:48 **21** **A.** Yes.
 14:20:48 **22** **Q.** What is your definition of fibrous talc?
 14:20:50 **23** **A.** It would be talc that had that aspect
 14:20:52 **24** ratio of 5-to-1.
 14:20:53 **25** **Q.** You would require parallel sides as well?
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14:20:56 **1** **A.** Yes.
 14:20:56 **2** **Q.** Is there a scientific consensus that there
 14:21:01 **3** is such a thing as fibrous talc?
 14:21:02 **4** **A.** Yes.
 14:21:02 **5** **Q.** Are you aware of any epidemiologist or
 14:21:07 **6** doctor who has studied the health effects of fibrous
 14:21:09 **7** talc?
 14:21:10 **8** **MS. O'DELL:** Object to the form.
 14:21:11 **9** **THE WITNESS:** Well, if the talc -- if
 14:21:18 **10** there's fibrous talc in with -- let's just say
 14:21:22 **11** we called it talc, whether it's got a fibrous
 14:21:24 **12** component or not, platy, you know, mostly platy.
 14:21:30 **13** As far as IARC is concerned, they say that that
 14:21:35 **14** is -- that will be -- if it has asbestos in it,
 14:21:38 **15** it's going to be regulated and hazardous to
 14:21:44 **16** health.
 14:21:44 **17** **Q.** (By Mr. Chachkes) The question was are
 14:21:45 **18** you aware of any epidemiologist or doctor who has
 14:21:48 **19** studied the health effects of fibrous talc?
 14:21:51 **20** **MS. O'DELL:** Object to the form.
 14:21:53 **21** **Q.** (By Mr. Chachkes) It's a yes or no
 14:21:54 **22** question.
 14:21:54 **23** **A.** Yes, there have been numerous studies on
 14:21:59 **24** fibrous talc, and I don't know if they're in some of
 14:22:04 **25** our reference material or not, but there have been
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14:22:05 **1** numerous studies that have been done.

14:22:07 **2 Q.** Can you name a single doctor or

14:22:09 **3** epidemiologist who has done a study on the health

14:22:11 **4** effects of fibrous talc --

14:22:13 **5** MS. O'DELL: Object to the form --

14:22:14 **6** THE WITNESS: Are you talking about

14:22:15 **7** medical doctors, Ph.D.s, what? You said doctor.

14:22:18 **8 Q.** (By Mr. Chachkes) Let's say medical

14:22:20 **9** doctor.

14:22:20 **10 A.** Yeah, let's say doctors like you said

14:22:22 **11** before, then yes, there are.

14:22:23 **12 Q.** Okay. Start with medical doctors.

14:22:25 **13 A.** Okay.

14:22:30 **14 Q.** Can you name a medical doctor who has

14:22:30 **15** studied the health effects of fibrous talc?

14:22:30 **16 A.** There are --

14:22:31 **17** MS. O'DELL: Object to the form.

14:22:31 **18** THE WITNESS: I can't name one right now

14:22:35 **19** as I sit here, but there are that have done

14:22:36 **20** those studies.

14:22:37 **21 Q.** (By Mr. Chachkes) Can you name an

14:22:38 **22** epidemiologist?

14:22:39 **23** MS. O'DELL: Object to the form.

14:22:40 **24** THE WITNESS: There are ones that have.

14:22:41 **25 Q.** (By Mr. Chachkes) Can you name one?

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14:23:27 **1 A.** I understand. I understand.

14:23:27 **2 Q.** Can you identify any published authority

14:23:29 **3** for your definition of fibrous talc?

14:23:31 **4 A.** Sure.

14:23:31 **5 Q.** What?

14:23:32 **6 A.** I would want to say EPA right now.

14:23:46 **7 Q.** Any other?

14:23:47 **8 A.** I'd have to think about that.

14:23:50 **9 Q.** Specifically what EPA document?

14:23:53 **10 A.** I'll have to find that for you. Be happy

14:23:58 **11** to find that.

14:23:58 **12 Q.** In the method in the 22262 method that you

14:24:04 **13** used in your report, does it use the phrase fibrous

14:24:08 **14** talc?

14:24:08 **15 A.** I don't recall. I'd have to look through

14:24:10 **16** it.

14:24:11 **17 Q.** Does it use the phrase asbestiform talc?

14:24:13 **18 A.** Same answer.

14:24:14 **19 Q.** Do you think those phrases are in there?

14:24:17 **20 A.** I would have to look.

14:24:18 **21 Q.** Are fibrous talc and asbestiform talc

14:24:24 **22** different?

14:24:25 **23 A.** Fibrous talc and asbestiform talc, if it

14:24:29 **24** meets the definition, it would be considered

14:24:31 **25** asbestiform talc, and you could still call it fibrous

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14:22:42 **1 A.** No, not as I sit here right here.

14:22:44 **2 Q.** Can you name just a general doctor who has

14:22:46 **3** studied the health effects of fibrous talc?

14:22:49 **4** MS. O'DELL: Object to the form.

14:22:49 **5** THE WITNESS: It's the same answer to the

14:22:51 **6** question. Doctor, doctor.

14:22:52 **7 Q.** (By Mr. Chachkes) Okay. Well, there's

14:22:53 **8** medical doctor and regular -- and other -- like

9 you're a doctor --

10 A. Well --

11 THE REPORTER: Wait. Wait.

14:22:58 **12** THE WITNESS: I know, but we said doctors.

14:23:02 **13 Q.** (By Mr. Chachkes) But sitting here today

14:23:03 **14** you can't name just a Ph.D. who has studied -- just

14:23:06 **15** by name -- a Ph.D. who has studied the health effects

14:23:09 **16** of fibrous talc -- exposure to fibrous talc?

14:23:10 **17** MS. O'DELL: Object to form.

14:23:12 **18** THE WITNESS: As I sit right here, I can't

14:23:14 **19** name them, but they do exist. I have reference

14:23:17 **20** material and I'd be happy to get that for you.

14:23:20 **21 Q.** (By Mr. Chachkes) Can you identify --

14:23:21 **22 A.** Would you like to have that material?

14:23:23 **23** Would you like to have that --

14:23:24 **24 Q.** This deposition doesn't work if you ask

14:23:26 **25** questions back to me.

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14:24:34 **1** talc.

14:24:35 **2 Q.** Are they --

14:24:35 **3 A.** So they could be one and the same.

14:24:37 **4 Q.** Could they be one and the same --

14:24:39 **5 A.** Let's say they are. If they meet the

14:24:41 **6** definition, then they are.

14:24:43 **7 Q.** So the two phrases are synonymous?

14:24:46 **8 A.** If they meet the specifications for the

14:24:48 **9** regulated fiber, the definition, than they are.

14:24:50 **10 Q.** Is there a situation where fibrous talc

14:24:53 **11** and asbestiform talc aren't the same?

14:24:56 **12** MS. O'DELL: Object to the form.

14:24:57 **13** THE WITNESS: Again, if they don't meet

14:24:58 **14** the aspect ratio, then they wouldn't be the

14:25:03 **15** same.

14:25:03 **16 Q.** (By Mr. Chachkes) Well, then they

14:25:04 **17** wouldn't be fibrous talc and asbestiform --

14:25:06 **18 A.** Sure. They could be --

14:25:06 **19** MS. O'DELL: Object to the form.

14:25:09 **20** THE WITNESS: -- fibrous at 4-to-1,

14:25:09 **21** 3-to-1, 2-to-1. Sure. They will have a fibrous

14:25:13 **22** form.

14:25:13 **23 Q.** (By Mr. Chachkes) So you're saying that

14:25:14 **24** if there's -- you could have fibrous talc at a 2-to-1

14:25:18 **25** aspect ratio, but it would not be asbestiform talc?

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14:25:21 **1** **A.** Correct.
 14:25:21 **2** **Q.** Are there two kinds of tremolite,
 14:25:34 **3** asbestiform and nonasbestiform?
 14:25:36 **4** **A.** Yes.
 14:25:36 **5** **Q.** Just identifying something as tremolite
 14:25:41 **6** doesn't mean it's asbestiform?
 14:25:43 **7** **MS. O'DELL:** Object to the form.
 14:25:44 **8** **THE WITNESS:** It can be massive tremolite.
 14:25:47 **9** You know, if it's fibrous and it meets the
 14:25:49 **10** definition, then it's going to be asbestiform.
 14:25:51 **11** I mean, according to the definition.
 14:25:53 **12** **Q.** (By Mr. Chachkes) The question is just
 14:25:54 **13** identifying something as tremolite does not mean it's
 14:25:56 **14** asbestiform; is that correct?
 14:25:57 **15** **MS. O'DELL:** Object to the form.
 14:25:58 **16** **THE WITNESS:** Once again, you would have
 14:26:02 **17** to look at the form.
 14:26:03 **18** **Q.** (By Mr. Chachkes) To determine whether
 14:26:04 **19** it's asbestiform?
 14:26:05 **20** **A.** Yes.
 14:26:06 **21** **MS. O'DELL:** Object to the form.
 14:26:07 **22** **Q.** (By Mr. Chachkes) Just identifying
 14:26:08 **23** something as anthophyllite doesn't mean it's
 14:26:10 **24** asbestiform; correct?
 14:26:11 **25** **MS. O'DELL:** Object to the form.
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14:27:06 **1** lead to elongate fragments that conform to the
 14:27:09 **2** definition of an asbestiform fiber?
 14:27:11 **3** **MS. O'DELL:** Object to form.
 14:27:12 **4** **THE WITNESS:** Yes.
 14:27:12 **5** **Q.** (By Mr. Chachkes) Do you agree with this
 14:27:13 **6** statement: Crushed nonasbestiform amphiboles rarely
 14:27:17 **7** have aspect ratios exceeding 30-to-1?
 14:27:21 **8** **A.** I mean, that is -- that's been stated, but
 14:27:29 **9** it's as rarely -- so it's not 100 percent. So you
 14:27:35 **10** can have some.
 14:27:35 **11** **Q.** But you agree with the statement?
 14:27:38 **12** **MS. O'DELL:** Object to the form. He just
 14:27:40 **13** said what he thought about the statement.
 14:27:41 **14** **THE WITNESS:** Yeah.
 14:27:41 **15** **Q.** (By Mr. Chachkes) It's yes or no. Do
 14:27:43 **16** crushed -- do you agree with this statement, yes or
 14:27:45 **17** no: Crushed nonasbestiform amphiboles rarely have
 14:27:48 **18** aspect ratios exceeding 30-to-1?
 14:27:50 **19** **MS. O'DELL:** You may answer it any way
 14:27:52 **20** you'd like, Doctor. You're not restricted.
 14:27:54 **21** **THE WITNESS:** I mean, I've already
 14:27:55 **22** answered part of the question, and I would say
 14:27:56 **23** yes, you know.
 14:28:00 **24** **MS. O'DELL:** We have been going about an
 14:28:01 **25** hour. Why don't we take a quick break.
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 14:26:12 **1** **THE WITNESS:** Once again, if it meets the
 14:26:15 **2** definition than it would be.
 14:26:17 **3** **Q.** (By Mr. Chachkes) Okay. And if it
 14:26:19 **4** doesn't meet the definition, it wouldn't be?
 14:26:21 **5** **MS. O'DELL:** Object to the form.
 14:26:22 **6** **THE WITNESS:** Well, it's still
 14:26:23 **7** anthophyllite. It may be, you know, below the
 14:26:26 **8** aspect ratio again. Causes the same health
 14:26:30 **9** effects.
 14:26:30 **10** **Q.** (By Mr. Chachkes) What's a cleavage
 14:26:36 **11** fragment again?
 14:26:36 **12** **MS. O'DELL:** Asked and answered.
 14:26:38 **13** **THE WITNESS:** Yeah. Talked about that
 14:26:39 **14** already.
 14:26:39 **15** **Q.** (By Mr. Chachkes) So what is it?
 14:26:41 **16** **A.** It is a -- it's a form that would not have
 14:26:45 **17** parallel sides. Wouldn't have the aspect ratio.
 14:26:49 **18** It's going to be an odd shape.
 14:26:50 **19** **Q.** Is something that had nonparallel sides
 14:26:55 **20** with an aspect ratio of 6-to-1, would that be a
 14:26:59 **21** cleavage fragment?
 14:27:00 **22** **MS. O'DELL:** Object to the form.
 14:27:01 **23** **THE WITNESS:** Most likely.
 14:27:02 **24** **Q.** (By Mr. Chachkes) Do you agree with the
 14:27:03 **25** statement: Crushing of nonasbestiform amphibole can
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 14:28:04 **1** **MR. CHACHKES:** Sure.
 14:28:43 **2** (Recess from 2:28 p.m. to 2:52 p.m.)
 14:28:43 **3** (Defendants' Exhibit 1 was marked for
 14:52:54 **4** identification.)
 14:52:54 **5** **Q.** (By Mr. Chachkes) Okay. Dr. Rigler, this
 14:53:11 **6** has already been marked as Rigler Exhibit 1. Can you
 14:53:15 **7** confirm that those are MAS invoices?
 14:53:17 **8** **A.** Let's see. It has MAS on the letterhead.
 14:53:26 **9** They look like they are, yep.
 14:53:29 **10** **Q.** Okay. It looks like the first page is an
 14:53:31 **11** April invoice. Am I right there?
 14:53:33 **12** **A.** April 8 to April 11, 2018.
 14:53:38 **13** **Q.** Okay. And it looks like the second one on
 14:53:42 **14** page 2 is a March invoice?
 14:53:44 **15** **A.** Let's see. Yes.
 14:53:46 **16** **Q.** And then page 3 looks like a single block
 14:53:50 **17** billing for, I'm guessing, the report, the
 14:53:56 **18** November 15 report?
 14:53:56 **19** **A.** I don't know. I have no idea. First time
 14:53:59 **20** I've seen these.
 14:53:59 **21** **Q.** Okay.
 14:54:00 **22** **A.** Yeah, so I don't know.
 14:54:01 **23** **Q.** Okay. So you wouldn't know whether
 14:54:03 **24** there's other billing --
 14:54:04 **25** **A.** I have no idea.
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14:54:05 **1** Q. And you don't know whether there's
 14:54:07 **2** underlying documents that support these?
 14:54:09 **3** A. I don't know.
 14:54:10 **4** Q. And you don't --
 14:54:11 **5** A. Have to ask Dr. Longo.
 14:54:12 **6** Q. Okay. And you don't know what the block
 14:54:14 **7** billing is for on number 3?
 14:54:15 **8** A. No.
 14:54:16 **9** Q. The third page, that is?
 14:54:17 **10** A. No, I don't.
 14:54:18 **11** Q. Do you know why the number 14 appears on
 14:54:22 **12** the third page?
 14:54:23 **13** A. That would be the department number.
 14:54:26 **14** Q. It's your department?
 14:54:27 **15** A. 14, yes.
 14:54:28 **16** Q. And what's that called?
 14:54:31 **17** A. I think it's called legal.
 14:54:33 **18** Q. Okay. So you're in legal?
 14:54:34 **19** A. Yes.
 14:54:35 **20** Q. Are you in any other departments?
 14:54:36 **21** A. No.
 14:54:37 **22** Q. Is Dr. Longo in legal?
 14:54:39 **23** A. Yes.
 14:54:39 **24** Q. Is he in any other departments?
 14:54:41 **25** A. Well, he is the departments.

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14:55:25 **1** A. I guess it does.
 14:55:27 **2** Q. Okay.
 14:55:27 **3** A. I just give them the hours.
 14:55:29 **4** Q. Okay. I'm done with that one.
 14:55:34 **5** A. All right.
 14:55:34 **6** MR. CHACHKES: I still have a request
 14:55:35 **7** pending for billing.
 14:55:37 **8** MS. O'DELL: That's what I have in my
 14:55:39 **9** possession.
10 MR. CHACHKES: Okay.
 14:55:39 **11** MS. O'DELL: If we receive any others,
 14:55:41 **12** I'll let you know.
 14:55:43 **13** Q. (By Mr. Chachkes) Okay. Can you pull up
 14:55:50 **14** Exhibit 5, which is, I think, if I've got it right,
 14:56:04 **15** 22262-2.
 14:56:14 **16** MR. SILVER: Alex, just for the record,
 14:56:16 **17** when you say exhibit numbers, these are exhibits
 14:56:17 **18** to the depo of Dr. Longo that happened on
 14:56:21 **19** February 5 of 2019?
 14:56:23 **20** MR. CHACHKES: Correct. And a good
 14:56:24 **21** clarification.
 14:56:24 **22** Q. (By Mr. Chachkes) So this is Exhibit 5 to
 14:56:28 **23** yesterday's Longo deposition, if you can --
 14:56:29 **24** A. I don't have that.
 14:56:30 **25** Q. It's probably in this stack. I'll help

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1 Q. Oh, okay.
 14:54:44 **2** A. He's MAS.
 14:54:44 **3** Q. Is he in every department, 1 through
 14:54:47 **4** whatever?
 14:54:47 **5** A. I would say yes to that, but you need to
 14:54:50 **6** ask him about that.
 14:54:50 **7** Q. What is the department called legal? What
 14:54:52 **8** is it?
 14:54:53 **9** A. 14. It just says 14.
 14:54:54 **10** Q. No, I mean substantively, what does legal
 14:54:58 **11** do? Why is there a group called legal?
 14:55:01 **12** A. It's just called. I don't know. That's
 14:55:02 **13** what they've always called it.
 14:55:03 **14** Q. Does it do all the work that is for
 14:55:06 **15** litigations?
 14:55:07 **16** A. I don't --
 14:55:09 **17** MS. O'DELL: Object to form.
18 THE WITNESS: -- know. You'd have to ask
 14:55:11 **19** Dr. Longo. Because they came up with the
 14:55:13 **20** numbers and designations.
 14:55:14 **21** Q. (By Mr. Chachkes) When you do work that
 14:55:16 **22** is billable to, let's say, a company that's not
 14:55:21 **23** involved in litigation, does that go through unit 14?
 14:55:24 **24** A. For me?
 14:55:25 **25** Q. Yes.

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14:56:32 **1** you find it.
 14:56:40 **2** MS. O'DELL: Are you referring to 22262-2?
 14:56:42 **3** MR. CHACHKES: Part 2, yes.
4 MS. O'DELL: Part 2.
 14:56:45 **5** MR. CHACHKES: Dash 2. Okay.
 14:56:51 **6** MS. O'DELL: I think I gave you mine.
7 MR. CHACHKES: That one's his. It's got
 14:56:58 **8** the stamp on it.
9 MS. O'DELL: It does, but I think I gave
10 him mine earlier.
11 THE WITNESS: Yeah, I think you did. It's
12 in there. She has it, hers.
 14:56:59 **13** Q. (By Mr. Chachkes) Okay.
 14:56:59 **14** A. There we go.
 14:57:02 **15** Q. Can you turn to page -- well, do you see
 14:57:06 **16** where there's a section 3, Terms and Definitions,
 14:57:10 **17** it's very near the front?
 14:57:12 **18** A. Yes.
 14:57:12 **19** Q. And there's a definition for asbestiform
 14:57:14 **20** that's 3.5?
 14:57:22 **21** A. Yes.
 14:57:23 **22** Q. And do you see where there's a definition
 14:57:25 **23** for asbestos, 3.6?
 14:57:26 **24** A. Yes.
 14:57:27 **25** Q. You didn't apply -- when you talk about

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14:57:36 **1** asbestos in your report, it's not the definition of
 14:57:40 **2** asbestos that's in 3.6; correct?
 14:57:43 **3** MS. O'DELL: Object to the form.
 14:57:44 **4** THE WITNESS: Yeah. The 3.6 definition is
 14:57:49 **5** the one that we say is -- this is a geological
 14:57:54 **6** definition.
 14:57:54 **7** **Q.** (By Mr. Chachkes) Right. And so my
 14:57:55 **8** question is when I read the word asbestos in your
 14:57:57 **9** report, it's not the 3.6 definition in this
 14:58:02 **10** Exhibit 5; right?
 14:58:03 **11** MS. O'DELL: Object to the form.
 14:58:04 **12** THE WITNESS: It is based on the
 14:58:08 **13** regulatory definition.
 14:58:09 **14** **Q.** (By Mr. Chachkes) And the same question:
 14:58:11 **15** Is it the -- it's different from the definition in
 14:58:15 **16** 3.6; correct?
 14:58:16 **17** **A.** The regulatory definition?
 14:58:18 **18** **Q.** The definition you're looking at right in
 14:58:20 **19** front of you --
 14:58:21 **20** **A.** Yes.
 14:58:21 **21** **Q.** -- that's 3.6?
 14:58:22 **22** **A.** Yes.
 14:58:22 **23** **Q.** So in your report when you use asbestos,
 14:58:24 **24** it's different than 3.6?
 14:58:26 **25** MS. O'DELL: Object to the form.
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14:58:27 **1** Go ahead.
 14:58:29 **2** THE WITNESS: The regulatory definition,
 14:58:32 **3** again, depending upon the document that you look
 14:58:34 **4** at, will include some of this language. For
 14:58:37 **5** instance, the EPA includes some of this same
 14:58:41 **6** language that's in 3.6, so you'll have some
 14:58:43 **7** overlap there.
 14:58:44 **8** **Q.** (By Mr. Chachkes) I'm not asking about
 14:58:45 **9** overlap.
 14:58:46 **10** Can I assume that whenever you use the
 14:58:47 **11** phrase asbestos in your report you mean verbatim what
 14:58:50 **12** is in 3.6 that's right in front of you?
 14:58:53 **13** MS. O'DELL: Object to the form. That's
 14:58:55 **14** not what he said.
 14:58:56 **15** THE WITNESS: I hear what you're saying.
 14:59:00 **16** Again, the regulatory definitions by standard
 14:59:07 **17** groups, such as EPA, ASTM, they have this
 14:59:16 **18** language in their definition, all right. So
 14:59:20 **19** there's an overlap there.
 14:59:21 **20** If you want to say we don't do that, what
 14:59:24 **21** I would say is there is an overlap there, but
 14:59:28 **22** this is a geological definition, and we -- you
 14:59:35 **23** can't measure this flexibility and strength at
 14:59:37 **24** the level of the structures that we're looking
 14:59:40 **25** at.
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14:59:40 **1** **Q.** (By Mr. Chachkes) Okay.
 14:59:41 **2** **A.** So I hope I've answered your question.
 14:59:43 **3** **Q.** I thought it was a simple question, so I
 14:59:45 **4** guess I have to ask it again.
 14:59:46 **5** But, I mean, when you say there is
 14:59:50 **6** asbestos in your report in J&J's bottles of cosmetic
 14:59:56 **7** talc, do you mean to say that it contains a group of
 14:59:59 **8** silicate materials belonging to the serpentine and
 15:00:02 **9** amphibole groups which have crystallized in the
 15:00:05 **10** asbestiform habit, causing them to be easily
 15:00:08 **11** separated into long, thin, flexible, strong fibers
 15:00:12 **12** when crushed or processed?
 15:00:14 **13** **A.** If -- again, you know, we go by what's in
 15:00:21 **14** the definition, the regulatory definition. And
 15:00:24 **15** again, that does overlap -- some of the wording in
 15:00:30 **16** those regulatory documents overlap what's in here
 15:00:35 **17** too. So that would be applicable, if that helps
 15:00:38 **18** answer the question.
 15:00:39 **19** **Q.** I think you know what the question is.
 15:00:41 **20** It's a very simple one.
 15:00:42 **21** Is that your definition of asbestos in
 15:00:44 **22** your report?
 15:00:45 **23** MS. O'DELL: Object to the form.
 15:00:46 **24** **Q.** (By Mr. Chachkes) Yes or no?
 15:00:48 **25** MS. O'DELL: Object to the form --
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15:00:49 **1** THE WITNESS: Part of it is.
 15:00:50 **2** MS. O'DELL: -- ask --
 15:00:50 **3** **Q.** (By Mr. Chachkes) -- which part isn't?
 15:00:51 **4** THE REPORTER: Wait.
 15:00:51 **5** MS. O'DELL: Asked and answered.
 15:00:56 **6** THE WITNESS: The strong fibers, the long,
 15:01:00 **7** flexible, strong fibers portion of it.
 15:01:01 **8** **Q.** (By Mr. Chachkes) Okay. You have not
 15:01:02 **9** determined that J&J talc -- one way or the other,
 15:01:06 **10** whether it is or isn't, you haven't done a
 15:01:09 **11** determination of what you're calling asbestos in J&J
 15:01:12 **12** talc is easily separated into long, thin, flexible,
 15:01:16 **13** strong fibers when crushed or processed?
 15:01:18 **14** MS. O'DELL: Object to form.
 15:01:19 **15** THE WITNESS: I don't know how we would do
 15:01:20 **16** that.
 15:01:20 **17** **Q.** (By Mr. Chachkes) Okay. And can you turn
 15:01:24 **18** to the next page, to cleavage fragment. Is that the
 15:01:28 **19** definition of cleavage fragment in 3.12 that you use
 15:01:32 **20** in your report?
 15:01:33 **21** **A.** I don't believe we're -- ask the question
 15:01:38 **22** again. Is that what we use in our report?
 15:01:40 **23** **Q.** Let me take a step back.
 15:01:42 **24** **A.** Is that the --
 15:01:42 **25** **Q.** Do you use the phrase cleavage fragment in
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15:01:45 **1** your report?
 15:01:46 **2** MS. O'DELL: Object to form.
3 THE WITNESS: We have used cleavage in our
 15:01:48 **4** report.
 15:01:48 **5** **Q.** (By Mr. Chachkes) Okay. Cleavage
 15:01:49 **6** fragment?
 15:01:49 **7** **A.** I want to say yes to that.
8 **Q.** Okay.
 15:01:51 **9** **A.** I'd have to look, but I believe so, yes.
 15:01:53 **10** **Q.** When I read cleavage fragment in your
 15:01:55 **11** report, is it the definition I'm reading in 3.12?
 15:01:59 **12** **A.** We would, again, refer to how it was --
 15:02:06 **13** that it didn't meet the regulatory definition of
 15:02:09 **14** parallel sides, less than 1/2 a micron, 5-to-1 aspect
 15:02:13 **15** ratio.
 15:02:14 **16** **Q.** Okay. And you would say that in your
 15:02:18 **17** report, something that is a fragment of a crystal
 15:02:23 **18** that is bounded by cleavage faces is not a cleavage
 15:02:27 **19** fragment if it has an aspect ratio of greater than
 15:02:29 **20** 5-to-1?
 15:02:30 **21** MS. O'DELL: Object to form.
 15:02:31 **22** THE WITNESS: Correct. If it had the
 15:02:32 **23** defining characteristics of the regulatory
 15:02:34 **24** definition.
 15:02:39 **25** MR. CHACHKES: Okay. No further
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15:02:41 **1** questions.
 15:02:42 **2** Subject to the same objection and
 15:02:46 **3** complaint we had yesterday about late produced
 15:02:49 **4** documents, I'll pass the witness.
 15:02:52 **5** MS. O'DELL: You know our position. We
 15:02:53 **6** don't believe they're late produced.
 15:02:55 **7** MR. CHACHKES: I thought you were agreeing
 15:02:56 **8** it was late produced, no?
 15:02:56 **9** MS. O'DELL: I just wanted to make sure
 15:02:58 **10** you didn't think my silence was acquiescence.
 15:03:00 **11** We're opposed.
 15:03:03 **12** EXAMINATION
 15:03:04 **13** BY MR. SILVER:
 15:03:05 **14** **Q.** Good afternoon, Dr. Rigler. My name is
 15:03:05 **15** Mark Silver. I am representing Imerys Talc America.
 15:03:06 **16** I only have a couple of questions for you.
 15:03:09 **17** With my questions, after I ask them, make
 15:03:10 **18** sure that your attorneys have a chance to respond.
 15:03:13 **19** There are some based on off-record conversations they
 15:03:16 **20** may or may not instruct you to answer and/or you
 15:03:19 **21** won't feel comfortable answering.
 15:03:21 **22** We're going to do what's known as making a
 15:03:22 **23** record so that we can have a collegial disagreement
 15:03:26 **24** at some hopefully later date and not today, but we'll
 15:03:28 **25** see how it goes.
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15:03:30 **1** The first one is easy. I just want to
 15:03:30 **2** make sure that I understand an answer you gave
 15:03:32 **3** earlier.
 15:03:35 **4** It was my understanding that you were
 15:03:36 **5** asked by Mr. Chachkes about whether you were working
 15:03:39 **6** on something that you intended to be published in
 15:03:43 **7** peer-reviewed literature relating to talc, and you
 15:03:45 **8** responded you could not confirm or deny.
 15:03:47 **9** Is that an accurate summarization of your
 15:03:50 **10** testimony?
 15:03:50 **11** **A.** That is what I said.
 15:03:51 **12** **Q.** Okay. And my understanding is you cannot
 15:03:53 **13** confirm or deny because you and/or MAS believe that
 15:03:58 **14** work, if it exists, would be proprietary; is that
 15:04:01 **15** correct?
 15:04:01 **16** **A.** And it's our policy also.
 15:04:03 **17** **Q.** Okay. So that work --
 15:04:06 **18** **A.** Yes.
 15:04:06 **19** **Q.** Is there a written policy on what MAS
 15:04:09 **20** considers proprietary?
 15:04:09 **21** **A.** That's Dr. Longo's policy, so you'll have
 15:04:11 **22** to discuss that with him.
 15:04:12 **23** **Q.** Okay. But have you ever seen a written
 15:04:14 **24** policy on it?
 15:04:15 **25** **A.** I don't recall seeing one. But again,
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15:04:19 **1** talk to Dr. Longo.
 15:04:20 **2** **Q.** Okay. But your understanding, because
 15:04:22 **3** you're the one -- right now, your understanding is
 15:04:24 **4** it's proprietary, and you got that understanding from
 15:04:26 **5** a conversation with Dr. Longo?
 15:04:28 **6** **A.** It is proprietary --
 15:04:29 **7** MS. O'DELL: Object to form.
 15:04:31 **8** THE WITNESS: -- and that's -- yeah, I
 15:04:31 **9** have to abide by that.
 15:04:32 **10** **Q.** (By Mr. Silver) But my question is you
 15:04:35 **11** got that understanding because you had a conversation
 15:04:37 **12** with Dr. Longo about it?
 15:04:38 **13** **A.** That's his policy. Yes.
14 **Q.** Okay.
 15:04:40 **15** **A.** Yes.
 15:04:41 **16** **Q.** So I'm going to ask you something a little
 15:04:44 **17** more discrete and let's see if we get -- if you give
 15:04:48 **18** the same answer, you give the same answer.
 15:04:49 **19** **A.** All right.
 15:04:50 **20** **Q.** This work, whether you're doing it or not,
 15:04:53 **21** that's intended to be published in peer-reviewed
 15:04:57 **22** literature, does it have anything to do with any of
 15:04:59 **23** the opinions contained in any of the MDL reports that
 15:05:02 **24** have been produced in this case?
 15:05:03 **25** MS. O'DELL: Object to the form.
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15:05:04 **1** THE WITNESS: I can't answer that. I
 15:05:08 **2** don't have an answer for that.
 15:05:09 **3** **Q.** (By Mr. Silver) Okay. Same question,
 15:05:11 **4** does this work intending to be published in
 15:05:15 **5** peer-reviewed literature, if it's being done, have
 15:05:16 **6** anything to do with any of the samples that were
 15:05:22 **7** provided by Imerys in this litigation?
 15:05:25 **8** MS. O'DELL: Objection. Form.
 15:05:26 **9** THE WITNESS: Again, I can't -- I can't
 15:05:28 **10** answer that. You'll have to talk to Dr. Longo.
 15:05:31 **11** **Q.** (By Mr. Silver) All right. This work
 15:05:32 **12** that you're intending to be published in
 15:05:35 **13** peer-reviewed literature, whether or not it's being
 15:05:37 **14** done, is it being funded in any way directly or
 15:05:40 **15** indirectly by any of the plaintiffs' counsel?
 15:05:43 **16** **A.** I don't know.
 15:05:43 **17** **Q.** This work, whether it's being done or not,
 15:05:47 **18** with respect to being intended to be published in
 15:05:50 **19** peer-reviewed literature, are you working with any
 15:05:54 **20** other scientists or experts that are also working
 15:06:04 **21** on -- in this talc litigation?
 15:06:05 **22** MS. O'DELL: Object to the form.
 15:06:06 **23** THE WITNESS: I don't know what their --
 15:06:09 **24** how they're working, in what capacity that way.
 15:06:12 **25** I don't know.
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15:06:13 **1** **Q.** (By Mr. Silver) Okay. This work, whether
 15:06:15 **2** it's being done or not, is it being worked in
 15:06:17 **3** conjunction with scientists outside of MAS?
 15:06:22 **4** **A.** Yes. If it is, in fact.
 15:06:25 **5** **Q.** If it is, in fact, being done.
 15:06:27 **6** I apologize, I don't have realtime here.
 15:06:37 **7** With respect to the work, if it is being
 15:06:41 **8** done on Imerys samples, do you have an
 15:06:47 **9** understanding -- strike that. I'll just state it.
 15:06:50 **10** To the extent there is work being done,
 15:06:53 **11** Imerys is hereby giving MAS notice verbally and will
 15:06:56 **12** follow it up in writing that it does not have Imerys'
 15:06:59 **13** consent to use any of the samples that was produced
 15:07:01 **14** in this litigation. If work's being done and you're
 15:07:03 **15** using it, MAS is on notice. Imerys will send
 15:07:07 **16** followup in writing.
 15:07:13 **17** One more.
 15:07:16 **18** Any of the work that's being done, if it's
 15:07:19 **19** being done with an intent to publish in a peer
 15:07:21 **20** review, does it have anything to do with any of the
 15:07:23 **21** underlying data used in any of the MDL reports?
 15:07:25 **22** **A.** I don't know. I have no idea. I can't
 15:07:29 **23** make a comment on it.
 15:07:34 **24** MR. SILVER: No further questions.
 15:07:35 **25** THE WITNESS: Thank you.
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15:07:41 **1** MR. FROST: I don't have a mic.
 15:07:48 **2** MR. CHACHKES: Switch with me.
 15:07:48 **3** MS. O'DELL: So we've got second J&J
 15:07:50 **4** counsel?
 15:07:51 **5** MR. FROST: J&J is just joining in the
 15:07:52 **6** instruction that if there are any Johnson &
 15:07:55 **7** Johnson samples being used in the work that may
 15:07:56 **8** or may not be being done, you know, at this
 15:07:59 **9** point we do not consent to releasing any of the
 15:08:01 **10** confidentially on the samples that exist under
 15:08:03 **11** the MDL order.
 15:08:08 **12** MS. O'DELL: Any further questions
 15:08:10 **13** for Imerys?
 15:08:13 **14** Okay.
 15:08:13 **15** EXAMINATION
 15:08:16 **16** BY MS. O'DELL:
 15:08:16 **17** **Q.** Okay. Dr. Longo [sic], I've got just a
 15:08:28 **18** few questions for you.
 15:08:30 **19** Would you please describe for us your
 15:08:34 **20** educational background? Let's start there.
 15:08:36 **21** **A.** I have a Bachelor of Science degree in
 15:08:43 **22** biology from Villanova University. And as I stated
 15:08:46 **23** before, this was a premedical curriculum, so it was
 15:08:50 **24** heavy on chemistry, organic chemistry. Also I think
 15:08:56 **25** I had comparative anatomy, all the typical
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15:09:01 **1** undergraduate courses you have. But the ones that I
 15:09:03 **2** selected beyond that were related to the medical
 15:09:06 **3** field.
 15:09:08 **4** And then I have a Ph.D. from the
 15:09:13 **5** University of Georgia in microbiology and a heavy
 15:09:18 **6** emphasis in that on pathogenic organisms, also using
 15:09:24 **7** electron microscopy techniques in the analysis of
 15:09:28 **8** different types of samples.
 15:09:30 **9** Also have postgraduate training at the
 15:09:33 **10** University of Georgia, also -- we did a lot of
 15:09:37 **11** research projects for my major professor at that
 15:09:42 **12** time.
 15:09:42 **13** Then I also taught a semester course at
 15:09:49 **14** Emory University in human anatomy.
 15:09:52 **15** So you want me to go on some more?
 15:09:55 **16** **Q.** You can stop when you're finished, when
 15:09:58 **17** you feel like you've described that. And if you --
 15:10:01 **18** well, let me break right here and just ask this
 15:10:02 **19** question.
 15:10:03 **20** Would you describe briefly your experience
 15:10:09 **21** in testing for the presence of asbestos?
 15:10:12 **22** **A.** Okay. I've been with MAS since the early
 15:10:20 **23** '90s. I think I came to work there in 1989. And
 15:10:25 **24** we -- one of the first projects that I worked on
 15:10:27 **25** while I was there was the analysis of these Kent
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15:10:32 **1** filter cigarettes that had crocidolite asbestos in
 15:10:36 **2** the filters, and that asbestos was in those filters
 15:10:39 **3** up to 10 percent by weight. 10 percent. They were
 15:10:43 **4** essentially solid crocidolite asbestos.
 15:10:47 **5** One of the things that the manufacturers
 15:10:51 **6** had touted was that they were -- how can I put it --
 15:10:56 **7** the best cigarettes for human health, essentially.
 15:10:59 **8** And if you talk to people that had smoked those, one
 15:11:04 **9** of the complaints they had was the filter worked so
 15:11:06 **10** well that all you got was hot air out of them, and we
 15:11:09 **11** can see why.
 15:11:10 **12** But nonetheless, we published a paper
 15:11:13 **13** based on our findings in manipulating the way that a
 15:11:19 **14** smoker would with those cigarettes to see if there
 15:11:22 **15** were asbestos shed from those filters.
 15:11:26 **16** Well, it turns out that we weren't the
 15:11:28 **17** first ones that found that information out, that at
 15:11:31 **18** the time there was a laboratory -- trying to remember
 15:11:36 **19** the name -- Ernest Fullam laboratory who actually did
 15:11:40 **20** work for the manufacturer, and they actually had
 15:11:42 **21** looked at that smokescreen for asbestos and found
 15:11:47 **22** that they had plenty of it coming out of there at the
 15:11:50 **23** time. So what we did was a study where we quantified
 15:11:53 **24** that amount.
 15:11:54 **25** And then that was published rapidly in the
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15:13:08 **1** our laboratories. So not just asbestos, but, you
 15:13:12 **2** know, other types of particulates.
 15:13:13 **3** **Q.** Are the testing methodologies that are
 15:13:18 **4** employed at MAS methodologies that are generally
 15:13:23 **5** accepted?
 15:13:23 **6** **A.** Yes.
 15:13:25 **7** **MR. CHACHKES:** Objection. Leading.
 15:13:26 **8** **THE WITNESS:** These are -- in cases where
 15:13:31 **9** we're doing analysis, we're using standard
 15:13:33 **10** methodologies. Whether it be mass
 15:13:36 **11** chromatography, ion chromatography, all these
 15:13:43 **12** are standard methods that we work, and we create
 15:13:45 **13** SOPs from the standard methods. So they are
 15:13:45 **14** incorporated into the actual methods that we
 15:13:51 **15** use.
 15:13:51 **16** And again, here in the asbestos analysis
 15:13:54 **17** area, we have multiple standard methodologies
 15:13:57 **18** that we use.
 15:13:57 **19** **Q.** (By Ms. O'Dell) Have you employed those
 15:13:59 **20** standard methodologies in your work in preparing the
 15:14:03 **21** report for the MDL?
 15:14:05 **22** **MR. CHACHKES:** Objection. Leading.
 15:14:06 **23** **THE WITNESS:** Yes. Yes, we have. And
 15:14:08 **24** they are all listed in the report.
 15:14:10 **25** **Q.** (By Ms. O'Dell) You've talked today about
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 15:11:57 **1** Journal of Cancer so that it could get out and people
 15:12:01 **2** could know that if they had smoked these cigarettes
 15:12:03 **3** before, it was time to talk to a doctor.
 15:12:05 **4** So that was one of the first studies that
 15:12:08 **5** I worked on on the asbestos side.
 15:12:11 **6** The other, we developed a filter cassette
 15:12:15 **7** at the laboratory that we were in the process of
 15:12:18 **8** manufacturing, and so we were in that business for a
 15:12:23 **9** while so I helped with that technology.
 15:12:25 **10** But we also did things like testing
 15:12:28 **11** batteries. I know that you've heard the Sears
 15:12:31 **12** DieHard batteries. So we did tests on those
 15:12:34 **13** batteries because they were coming back -- people
 15:12:37 **14** were buying them and then the battery would die
 15:12:39 **15** within a very short period of time, and the
 15:12:43 **16** contention was that these batteries were defective.
 15:12:46 **17** Well, what was happening was they were
 15:12:47 **18** buying batteries from people, charging them up, and
 15:12:50 **19** putting them back on the shelf. So we essentially
 15:12:53 **20** proved that that was happening. And that was a large
 15:12:55 **21** study that we did in the early '90s also. So it was
 15:12:58 **22** a big materials analysis study.
 15:13:01 **23** But over the years I've participated in
 15:13:03 **24** hundreds of studies that have analyzed all kinds of
 15:13:06 **25** particulates using the technologies that we have at
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 15:14:12 **1** a quality control program that you have at MAS.
 15:14:16 **2** Please describe that, you know, generally.
 15:14:19 **3** **A.** Okay. The quality program for us to be
 15:14:25 **4** certified by NVLAP NIST, National Institute of
 15:14:30 **5** Standards and Technology, is essentially along the
 15:14:33 **6** lines of what's called ISO 17025, which is
 15:14:37 **7** methodologies for laboratories.
 15:14:41 **8** And they have an entire suite of quality
 15:14:46 **9** controls that you use for all of your
 15:14:49 **10** instrumentation, for your calibration methods, and
 15:14:53 **11** for the analysts, because in these cases, the
 15:14:56 **12** analysts are essentially the machines. They're not
 15:15:00 **13** like gas chromatographs; they are people, and the
 15:15:03 **14** people have to be certified for the methods.
 15:15:05 **15** So they are put through the rigors of
 15:15:08 **16** actually extensive training in the beginning when
 15:15:12 **17** they come to our laboratory, and then they have to
 15:15:15 **18** take periodic tests, if you will, from the American
 15:15:19 **19** Industrial Hygiene Institute, AIHA, and also NIST
 15:15:25 **20** NVLAP. They'll send us blind samples, and then what
 15:15:29 **21** we have to do is analyze them and identify them.
 15:15:32 **22** So -- and we do the same thing for other
 15:15:34 **23** programs. Like we do mold analysis, and we're part
 15:15:37 **24** of the AIHA, American Industrial Hygiene
 15:15:41 **25** Association's, certification for our laboratory.
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15:15:43 **1** We also have what's called A2LA. That's
 15:15:47 **2** another certifying body. They're all based upon the
 15:15:52 **3** ISO 17025 for laboratories. So it's very extensive
 15:15:56 **4** quality control.
 15:15:56 **5** **Q.** For approximately how many years has MAS
 15:16:00 **6** had a quality control program like you described?
 15:16:03 **7** **A.** Since as long as I've been there.
 15:16:06 **8** **Q.** So more than 30 years?
 15:16:07 **9** **A.** Oh, yeah. Yeah.
 15:16:08 **10** **Q.** What's your responsibility in the quality
 15:16:10 **11** control process?
 15:16:12 **12** **A.** Well, we have a quality control officer,
 15:16:17 **13** and my responsibility is to see that quality of
 15:16:26 **14** program's followed for the work that we do.
 15:16:29 **15** Now, I mean, the program's followed
 15:16:33 **16** according to the certifying body, so we have to
 15:16:37 **17** follow their protocols and standards. And so we just
 15:16:43 **18** have to be sure that we've documented all of our
 15:16:46 **19** activities for quality in all these areas.
 15:16:49 **20** **Q.** Are the quality control standard
 15:16:55 **21** procedures that you've described applied both in --
 15:16:59 **22** are they applied in nonlitigation matters, I'm
 15:17:02 **23** assuming?
 15:17:02 **24** **A.** Yes.
 15:17:02 **25** **Q.** Are they applied in litigation matters?
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15:19:06 **1** MR. SILVER: Objection to form.
 15:19:08 **2** THE WITNESS: Well, of course, there's
 15:19:09 **3** client confidentiality, which we hold to the
 15:19:13 **4** highest in terms of any discussions of any work
 15:19:15 **5** that we're doing for anyone else. As you've
 15:19:19 **6** seen today, I haven't talked about any clients
 15:19:22 **7** that we work with, and can't do that.
 15:19:24 **8** As far as publications, that type of
 15:19:27 **9** thing, we don't -- again, that's just a policy.
 15:19:31 **10** We had a bad experience a number of years ago,
 15:19:35 **11** and since that time we've adopted that policy,
 15:19:38 **12** and it's part of the confidential documentation
 15:19:42 **13** that we keep.
 15:19:49 **14** MS. O'DELL: Nothing further. Thank you.
 15:19:53 **15** MR. CHACHKES: Nothing more here.
 15:20:02 **16** MR. FROST: I just want to make it clear,
 15:20:06 **17** until we can resolve this issue regarding the
 15:20:08 **18** publication or the potential publication of
 15:20:09 **19** these issues, we would like to and deem that
 15:20:12 **20** this deposition remains open.
 15:20:14 **21** MS. O'DELL: We oppose that, as I think
 15:20:17 **22** the rule is very clear in terms of discovery of
 15:20:20 **23** confidential proprietary matters, and Dr. Rigler
 15:20:23 **24** has testified these are proprietary matters, and
 15:20:27 **25** so we would oppose holding the deposition
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15:17:04 **1** **A.** Yes. They're applied in all matters of
 15:17:06 **2** analysis. So we -- I mean, machine calibration,
 15:17:15 **3** analyst training calibration, if you will, that way,
 15:17:19 **4** all of that has to be followed.
 15:17:21 **5** **Q.** Is the methodology that you've used in
 15:17:51 **6** rendering your opinions in this case the same
 15:17:53 **7** methodology that you use in nonlitigation matters?
 15:17:55 **8** **A.** Yes. Same standard types of methods.
 15:17:59 **9** Yes.
 15:17:59 **10** **Q.** Is there anything -- strike that. Let me
 15:18:03 **11** ask this.
 15:18:03 **12** What was your responsibility in relation
 15:18:07 **13** to the MDL report?
 15:18:10 **14** **A.** As I stated earlier, it was report review,
 15:18:14 **15** documentation review. As far as data review, I had a
 15:18:20 **16** big portion of the data review. And then the quality
 15:18:23 **17** review.
 15:18:25 **18** **Q.** Okay. You've been asked a number of
 15:18:33 **19** questions about the policy at MAS regarding ongoing
 15:18:46 **20** research or ongoing discussions about research --
 15:18:50 **21** **A.** Yes.
 15:18:50 **22** **Q.** -- and -- do you have an understanding as
 15:18:56 **23** to why it is the policy at MAS not to discuss studies
 15:19:00 **24** that have not been completed or still being
 15:19:03 **25** formulated?
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15:20:29 **1** open --
2 MR. FROST: Sure. That's fine.
 15:20:31 **3** MS. O'DELL: -- and certainly discovery.
 15:20:34 **4** MR. FROST: Thank you.
 15:20:36 **5** (Deposition concluded at 3:20 p.m.)
6 (Pursuant to Rule 30(e) of the Federal
7 Rules of Civil Procedure and/or O.C.G.A.
8 9-11-30(e), signature of the witness has been
9 reserved.)
10 (Original transcript sent to Jack Frost.)
11
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CERTIFICATE

STATE OF GEORGIA:

COUNTY OF HALL:

I hereby certify that the foregoing transcript was taken down, as stated in the caption, and the questions and answers thereto were reduced to typewriting under my direction; that the foregoing pages 1 through 228 represent a true, complete, and correct transcript of the evidence given upon said hearing, and I further certify that I am not of kin or counsel to the parties in the case; am not in the regular employ of counsel for any of said parties; nor am I in anywise interested in the result of said case.

This, the 8th day of February, 2019.

FRANCES BUONO, B-791
Georgia Certified Court Reporter

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DEPOSITION OF MARK W. RIGLER, PH.D. /FCB

I do hereby certify that I have read all questions propounded to me and all answers given by me on the 6th day of February, 2019, taken before Frances Buono, and that:

- 1) There are no changes noted.
2) The following changes are noted:

Pursuant to Rule 30(e) of the Federal Rules of Civil Procedure and/or the Official Code of Georgia Annotated 9-11-30(e), both of which read in part: Any changes in form or substance which you desire to make shall be entered upon the deposition...with a statement of the reasons given...for making them. Accordingly, to assist you in effecting corrections, please use the form below:

Page No. ____ Line No. ____ should read: _____

Page No. ____ Line No. ____ should read: _____

Page No. ____ Line No. ____ should read: _____

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Pursuant to Article 10.B. of the Rules and Regulations of the Board of Court Reporting of the Judicial Council of Georgia which states: "Each court reporter shall tender a disclosure form at the time of the taking of the deposition stating the arrangements made for the reporting services of the certified court reporter, by the certified court reporter, the court reporter's employer, or the referral source for the deposition, with any party to the litigation, counsel to the parties or other entity. Such form shall be attached to the deposition transcript," I make the following disclosure:

I am a Georgia Certified Court Reporter. I am here as a representative of Atlanta Reporters, Inc. Atlanta Reporters was contacted to provide court reporting services for the deposition. Atlanta Reporters will not be taking this deposition under any contract that is prohibited by O.C.G.A. 15-14-37(a) and (b).

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FRANCES BUONO, B-791
Georgia Certified Court Reporter

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DEPOSITION OF MARK W. RIGLER, PH.D. /FCB

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Page No. ____ Line No. ____ should read: _____

If supplemental or additional pages are necessary, please furnish same in typewriting annexed to this deposition.

MARK W. RIGLER, PH.D.

Sworn to and subscribed before me,
This the ____ day of ____, 20__.

Notary Public
My commission expires: _____

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Exhibit 30

**MISSOURI CIRCUIT COURT
TWENTY-SECOND JUDICIAL CIRCUIT
(City of St. Louis)**

GAIL LUCILLE INGHAM, <i>et al.</i> ,)	
)	
Plaintiffs,)	Cause No. 1522-CC10417
)	
vs.)	
)	
JOHNSON & JOHNSON, <i>et al.</i> ,)	Division: 10
)	
Defendants.)	

AFFIDAVIT OF DR. MARK RIGLER PH.D

On May 21, 2018 Dr. Mark W. Rigler appeared before me the undersigned notary public, and upon being duly sworn stated as follows:

1. My name is Mark W. Rigler. My business address is 3945 Lakefield Court, Suwanee GA 30024. I have personal knowledge of the facts stated here in, and they are all true and correct.

2. I have a Ph.D. in Microbiology from the University of Georgia. I have been a licensed clinical electron microscopy Laboratory Director for the state of Georgia. I have been trained in all phases of electron microscopy including morphological identification of tissues and materials, selected area electron diffraction (SAED), and energy dispersive x-ray analysis (EDS). I have also been trained in the methods of tissue processing that are used by clinical pathologist which include histological sample preparation for histological slide preparation, tissue analysis and identification at the optical microscopy level. I have also been trained in all phases of tissue preparation and tissue sectioning for transmission electron microscopy including tissue preparation for scanning electron microscopy and tissue preparation for cryo-electron microscopy. At MAS I

have directed the analysis of a variety of materials and biological tissues by transmission and scanning electron microscopy including the analysis mineralogical particulates and microfibers including tremolite, actinolite, anthophyllite, chrysotile, amosite and crocidolite asbestos.

3. I have 25 years of experience analyzing soft tissues such as lung tissue, liver, muscle, and a variety of other soft tissues. I have been trained in the histological examination of human tissue types such as epithelial tissue, connective tissue, cartilage, bone, blood as well as have been trained to identify complex organ tissue types including muscle, endocrine, liver, reproductive (ovary, fallopian tube, testes, gametes) gastrointestinal, skeletal, and nervous tissue. I have used a variety of preparation techniques for analyzing human tissues samples for optical and electron microscopy and have prepared tissue samples using the same histological techniques as clinical pathologists as well as have been trained in the histological examination of human tissues. I have used tissue preparation methods that are well established in the literature and in laboratories worldwide. The method used is a technique for preparing soft tissues such as lung, ovarian, fallopian, and lymphatic tissue and is the same technique used regardless of the type of soft tissue. In this method, soft tissues are incubated in a strong basic solution of sodium hypochlorite, potassium hydroxide, sodium hydroxide, or a combination of these solutions. A typical base solution, such as 8% bleach, completely dissolves the soft tissue and preserves mineralogical particulates such as asbestos and talc. These asbestos and talc particles can be recovered by filtration then identified and quantified using transmission or scanning electron microscopy (1-7), . I have performed this process hundreds of times, and regardless of the soft tissue type to be analyzed, the processing of the tissue is the same and the result from the processing, that is, the recovery and isolation of asbestos and talc, is also the same. I have testified in a number of previous cases. And my testimony has been challenged on many occasions pursuant

to *Daubert v. Merrill Dow Pharmaceuticals*. On each of these occasion, the court has overruled the challenge and allowed me to testify.

4. The idea of background asbestos is predicated on studies of air from urban areas (1). These studies have shown air levels of asbestos in the range of 0.0001 to 0.00001 fibers/cc of air and the only asbestos type usually found has been chrysotile. To date, chrysotile asbestos has not been detected in any of the ovarian tissue samples tested at MAS. No tremolite or anthophyllite has been found floating around in urban air according to published studies. The premise of exposure to background levels of tremolite or anthophyllite is unfounded. The woman in the cases were not exposed to any known “background” levels of asbestos.

5. The analysis of the ovarian tissue samples by MAS was a laboratory analysis. Single ovarian, fallopian tube, or pelvic lymph node tissue samples from eight women were analyzed for asbestos and talc burden at MAS. The scientific method used for all of these sample analyses was predicated on the null hypothesis, that the human reproductive tissue in its natural state is void of talc and asbestos particles. The process of cellular growth occurs from the inside out, that is, cell division pushes outward naturally keeping tissues free of particles and fibers. This process, along with scavenger cells, excludes foreign particles at all cellular levels allowing the body to reject and expel foreign particles. This is why no asbestos or talc particles are expected to be found in tissues unless they have been exposed to asbestos or talc (10). However, if the cellular mechanisms for these processes are overwhelmed by heavy or long term continuous exposures to particles such as asbestos and talc, they will accumulate in the tissue. Large asbestos structures (approximately >15 micrometers in length) are not typically found in tissue samples simply because they are not always retained by the body due to physics and their size. Most of the retained fibers and talc particles found in the body are less than 5 micrometers in size because they are

small enough to be transported and moved around in the body. (16, 17, 18) . Finding asbestos or talc particles in human tissues is an indication of one of two things; exposure of the individual to asbestos and talc or contamination of the sample. To rule out the possibility of contamination, the proper laboratory controls, consisting of a process blank and a wax paraffin blank, were run for each analysis along with the tissues samples. Running these laboratory blanks ruled out the possibility of contamination in these tissue analysis cases. It is therefore my opinion that talc and asbestos particulates found in the ovarian tissue was due to exposure of each woman to asbestos and talc bearing products during their lifetime. Samples of ovarian, fallopian and lymph node tissue were analyzed at my laboratory for asbestos burden and seven of the eight women in those cases had asbestos in their ovaries and all eight had talc in their ovarian, fallopian tube, or pelvic lymph node tissue. A review of each woman's medical history indicated that none of them had exposure to any asbestos bearing products (8, 9). However, their histories did show substantial and significant use of baby powder during their lifetime. It has been established in published studies that baby powder has been contaminated with asbestos (11, 12). At MAS, analysis of Johnson & Johnson baby powders has also shown that at least half of tested baby powder samples contained tremolite or anthophyllite asbestos (13). Thus, I concluded that the talc products used by the women whose tissue I examined were the probable source of the asbestos I found in their tissue. My findings were similar to those reported by Gordon in lung tissue of a patient exposed to another company's commercial talcum powder that used some talc from one of the same mines used in Johnson & Johnson's baby powder. (11).

6. For the analysis and identification of asbestos, MAS uses the United States Federal rules and regulations as promulgated in the Federal register volume 52 number 210 October 30, 1987 40 CFR part 763, Asbestos Containing Materials in Schools, final rule notice

per the Asbestos Hazard Emergency Response Act (AHERA) which was enacted under the toxic substances control act (TSCA) of 1986 (14). The rules define how to analyze and identify asbestos using transmission electron microscopy (TEM), energy dispersive x-ray analysis (EDS) and selected area electron diffraction (SAED). Under the rule in the definition of terms, a fiber is defined as, "A structure having a minimum length greater than or equal to 0.5 micrometers and an aspect ratio (linked with) of 5:1 or greater and substantially parallel sides. Note the appearance of the end of the fiber I.E., whether it is flat, rounded or dovetailed (p. 41868) (14)." Additionally in the definition of terms, asbestiform is defined as "a specific type of mineral fibrosity in which the fibers and fibrils possess high tensile strength and flexibility (p. 41858) (14)" This definition, while general is consistent with industry understanding that asbestiform means asbestos-like (fibrous, strong and flexible) and is mainly a geological definition reserved for large asbestos bundles and fibers that are easily seen with the naked eye. This definition has mainly been used in a commercial sense to differentiate grades of asbestos in order to establish commercial pricing. For instance, grades of asbestos with long flexible fibers are more valuable for certain kinds of applications and can cost more than shorter grades of asbestos (15, 19).

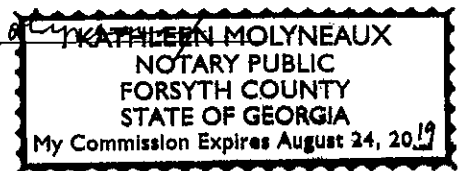
7. MAS is a NVLAP certified asbestos analysis lab (20) and all asbestos analyses performed at MAS unequivocally identify the type of asbestos according to the federal AHERA rules according to the shape (substantially parallel sides), size (greater than 0.5 micrometers in length), aspect ratio (at least 5:1 length to width), chemistry (by energy dispersive x-ray spectroscopy (EDS)), and crystallinity (by selected area electron diffraction pattern (SAED)). The strength and flexibility of extremely small asbestos structures (fibers, bundles) cannot be determined with the electron microscope. However, asbestos fibers and bundles can be positively identified with the transmission electron microscope and, each positively identified asbestos fiber

or bundle must conform to the physical properties, including strength and flexibility (i.e. asbestiform) of each asbestos type shown in the published literature (21, 22, 23). Microscopic or macroscopic asbestos fibers and bundles will possess strength and flexibility regardless of the size.


Mark W. Rigler Ph.D

Subscribed and sworn to before me on this 21st day of May, 2018.


NOTARY PUBLIC



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Exhibit 32

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RICARDO RIMONDI and PILAR RIMONDI,

Plaintiffs,

vs.

BASF CATALYSTS LLC (as successor to Engelhard Corp., Engelhard Minerals & Chemicals Corp., and Minerals & Chemicals Corp.), *et al.*,

Defendants.

SUPERIOR COURT OF NEW JERSEY
LAW DIVISION MIDDLESEX COUNTY

DOCKET NO. MID-L-02912-17

CIVIL ACTION
ASBESTOS LITIGATION

**CERTIFICATION OF WILLIAM E. LONGO,
Ph.D.**

I, William E. Longo, Ph.D., of full age, hereby certify as follows:

1. I am of sound mind and otherwise competent to make this Certification. The evidence set out in the following Certification is based on my personal knowledge. If called upon, I could and would competently testify thereto.

2. I have a Bachelor of Science degree in Microbiology, a Master of Science degree in Engineering and a Doctorate in Philosophy in Materials Science, from the University of Florida. My education and employment history may be found in my Curriculum Vitae, which is attached hereto as Exhibit A.

3. I am currently employed at Materials Analytical Services (MAS), LLC as the President. For the last 30 years, I have studied the content, type, and release of asbestos fibers from asbestos-containing products, including products that contain talc. MAS is accredited by the American Industrial Hygiene Association for measurement of asbestos fibers by phase contrast microscopy

and for the analysis of bulk samples of asbestos. MAS is also certified by the National Volunteer Laboratory Accreditation Program for measurement of bulk samples and air samples of asbestos.

4. As a materials scientist, I study the relationships among structure, properties, synthesis, and performance of a wide range of materials. I examine why and how materials behave under various conditions, such as temperature, pressure, stress or exposure to climatic conditions, and how materials are used in every aspect of people's lives. I have spent the last 30 years studying all aspects of asbestos analysis including the use of air samples to analyze the airborne asbestos dust generated from the use of asbestos containing products. This would include the use of both midget impinger and air cassettes. Under my direction our laboratory has analyzed over 300,000-400,000 asbestos samples which included many thousands of air samples.

5. In addition to the routine analysis of air samples for asbestos content, again under my direction, MAS has performed well over a hundred work practice simulations that involve the measurement of airborne asbestos fibers from the use of these products using scientifically recognized methodologies. These work practices studies have been performed for both plaintiffs and defendants; including Westinghouse, Rockbestos, General Electric, Guard-Line, Carborundum, American Insulating Wire Corporation, Continental Wire Company, Eutectic, Tecumseh Engines and Vickers Hydraulic Pumps.

6. At MAS, I analyze and study a wide spectrum of products and associated chemicals, including studies of various asbestos-containing products that test the potential for release of asbestos fibers into the air. These studies demonstrate, among other things, whether a product manufacturer could have anticipated the quantity of asbestos released into the air from its products as well as the levels of asbestos fibers released under certain circumstances. I perform these tests under rigorously controlled laboratory conditions following the governmental standards promulgated by NIOSH and the EPA. Using a specifically designated testing room, I simulate the

typical uses of asbestos-containing products, including for example asbestos-containing cable-hole covers and asbestos cement pipe. MAS utilizes multiple, standardized analytical testing techniques to determine the amount of asbestos released into the air and dispersed into workers' breathing zones, their clothing, and surroundings. MAS methods include the very testing techniques routinely employed by and available to the asbestos industry in the 1950's and 1960's, as well as updated, standardized testing procedures.

7. I am a member of numerous organizations and professional groups specializing in the testing and analysis of asbestos-containing materials, including the former Environmental Protection Agency (EPA) Peer Review Group for the Asbestos Engineering Program, the American Industrial Hygiene Association (AIHA), Materials Research Society, American Society for the Testing of Materials (ASTM), and the American Society of Materials. I have given numerous lectures, including "Settled Dust: Asbestos and Other Particulates," "The Role of the Laboratory Manager, Quality Assurance Officer and the Analyst for NIST Accreditation," and "Fundamentals of Asbestos Analysis by TEM." Additionally, I was requested by the EPA, along with other scientists, to help develop the EPA's protocol for taking and analyzing settled asbestos dust samples. As a member of ASTM, I was also responsible for writing the current ASTM asbestos dust analysis standards.

8. I have published numerous articles on the subject of the analysis and testing of asbestos-containing materials, including the quantification of asbestos particles released upon manipulation of these asbestos products in the manner performed in the work environment. My articles include *Demonstration of the Capability of Asbestos Analysis by Transmission Electron Microscopy* in the 1960's in MICROSCOPE, *Asbestos Exposure During and Following Cable Installation in the Vicinity of Fireproofing* in ENVIRONMENTAL CHOICES TECHNICAL SUPPLEMENT; and *Fiber Release During the Removal of Asbestos-Containing Gaskets: A Work Practice Simulation*, published in the APPLIED OCCUPATIONAL AND ENVIRONMENTAL HYGIENE JOURNAL in 2002 and

Zonolite Attic Insulation Exposure Studies, in the INTERNATIONAL JOURNAL OF OCCUPATIONAL AND ENVIRONMENTAL HEALTH published in 2010. My research and peer-reviewed publications on the subject of the analysis and testing of asbestos-containing materials as described above may be found in my Curriculum Vitae, which is attached hereto as Exhibit A.

9. My consulting extends beyond testimony for plaintiffs in asbestos cases. MAS also consults with defense firms and outside the litigation context with well-known companies such as Hitachi, Intel, BMW, Honda, Dow, Scotts and others. MAS is a leading engineering consulting firm which provides a broad range of services including environmental and industrial hygiene and emissions testing of construction products. MAS has performed consulting work for government agencies such as the Centers for Disease Control and the National Institutes of Health. MAS has also worked as an expert for the City of New York, State of New York, State of Hawaii, State of Texas, State of Utah, City of Los Angeles, City of Baltimore, City of Chicago and the City of Boston in their respective litigation against asbestos companies for property damage litigation. MAS has been involved in testing asbestos-containing materials for over thirty years, and has analyzed hundreds of thousands of asbestos samples.

10. I regularly perform work for clients not involved in litigation and utilize the same generally accepted methodologies and analysis described above. MAS's studies and videotape demonstrations are used for educational and training purposes in conjunction with the American Industrial Hygiene Association, American Society of Safety Engineers, the Environmental Institute, AHERA certification training and the U.S. Public Health Service. Moreover, we go through very stringent and thorough certification processes on a regular basis.

11. Only about 35 to 40% of MAS's overall income is derived from testimony and testing products for asbestos fiber release. Most of what MAS does is non-asbestos litigation and consulting with industry on potential hazards contained in their products or materials. Also I have

performed Work Practice studies on behalf of defendant manufacturers that include GE, Carborundum, American Insulated Wire Corporation, Guard-Line safety apparel and Tecumseh lawn mower engines. These defendants approved of our use of standard methodology for the measurement of airborne asbestos fibers from the use of their products.

12. I have been qualified many times in courts throughout the United States as an expert witness in both material science and industrial hygiene matters relating to asbestos issues, including cases involving talc and talcum powder products. I was most recently qualified as an expert witness regarding my analysis of Johnson & Johnson Baby Powder and Shower to Shower talc products in *Herford v. AT&T, et al.* in Los Angeles, California, and in *Lanzo v. Cyprus Amax Minerals Company* in New Brunswick, New Jersey.

13. I authored a report, dated March 11, 2018, entitled "Analysis of Johnson & Johnson Baby Powder and Valiant Shower to Shower Talc Products for Amphibole Asbestos", which discussed the analysis of thirty separate containers of talc containing Johnson & Johnson's Baby Powder and Valeant Shower-to-Shower for the presence of amphibole asbestos fibers, specifically tremolite. The container construction (metal to plastic) and labeling differences indicate that the products cover a span of many years. The thirty containers were provided by three different law firms to me. One of these samples (Number M665 I 4-001) was a Johnson's Baby Powder product provided by Carolyn Weirick from her home. That bottle contained approximately 24,700 anthophyllite asbestos fibers/gram. A true and correct copy of that report dated March 11, 2018, is attached hereto as Exhibit B.

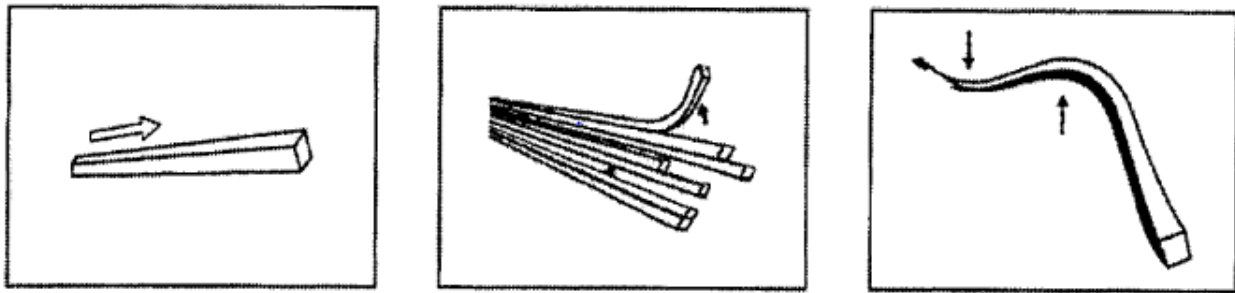
14. For preparation of the samples, we followed the protocol laid out by Professor Alice Blount in her peer-reviewed publication *Amphibole Content of Cosmetic and Pharmaceutical Talcs*. It was conservatively estimated by Dr. Blount that for every 1,000 amphibole particles present in cosmetic and pharmaceutical grade talcs, there would be 1,000,000 talc particles. This large number

of talc-to-amphibole structure ratio, coupled with transmission electron microscope ("TEM") filter preparation overloading issues, reduces the probability of detecting any trace amount of fibrous amphibole structures that may be present in the talc sample by analytical transmission electron microscopy ("ATEM") analysis. In order to address these inherent difficulties, we optimized the heavy liquid density separation sample preparation method originally published by Blount in 1991. Like Blount, our analysis detected primarily tremolite (and the tremolite series asbestos mineral richterite) and some iron rich anthophyllite in both Johnson's Baby Powder and Shower to Shower. I hereby adopt and incorporate that report into this certification as though it was set forth in full.

15. Subsequently, on February 9, 2018, my laboratory received two separate samples from a 1978 container of Johnson's Baby Powder. According to the information supplied with these two samples, they were collected from a February 8, 1978 historical Johnson's Baby Powder container that was supplied by Johnson & Johnson, lot number 113J and bottle/container identification number JBP084. These two samples were given MAS laboratory tracking numbers MAS68233-001 and -002 (two samples from the same bottle). Since the amount of possible amphibole content of the 1978 Johnson's Baby Powder product was expected to be at trace levels (0.1 % or less), it was recognized that this analysis would require the use of an analytical transmission electron microscope (ATEM) as described in the previous March 2018 report (Exhibit B). Using the Blount talc density heavy liquid preparation method for these samples, our ATEM analysis showed that the two 1978 Johnson's Baby Powder product samples contained detectable amounts of amphibole asbestos (anthophyllite) at a concentration range of between 7,240 fibers/gram to 22,100 fibers/gram. A true and correct copy of the February 16, 2018 finding is attached hereto as Exhibit D. I hereby adopt and incorporate that report into this certification as though it was set forth in full.

16. Johnson & Johnson attorneys have alleged that the asbestos structures my laboratory identified in the Johnson & Johnson talcum powder products are non-asbestiform or "cleavage fragments". Without getting into the merits of this allegation, my laboratory conducted analysis using Scanning Electron Microscopy (SEM) of the anthophyllite reported in the two 1978 Johnson's Baby Powder samples from Johnson & Johnson. The SEM analysis confirms that the structures my laboratory identified cannot be considered "cleavage fragments" and indeed are bundles of numerous asbestos fibers. These asbestos structures evidence classic asbestiform growth habits as described in *The Asbestiform and Nonasbestiform Mineral Growth Habit and Their Relationship to Cancer Studies* by Bailey, Kelse, Wylie, and Lee:

ASBESTIFORM



In the asbestiform habit, fibers grow almost exclusively in one direction and exhibit narrow width (on the order of $0.1\ \mu\text{m}$). Fibers that are visible to the eye are bundles of individual crystal fibers known as "fibrils". In some deposits, there is a range in fibril width, sometimes extending up to as much as $0.5\ \mu\text{m}$. Asbestiform fibers wider than $1.0\ \mu\text{m}$ are always bundles of fibrils. Asbestiform minerals have fibrils that are easily separated, although variability exists. In populations of asbestiform fibers, the distribution of particle widths will reflect single fibrils as well as bundles of fibrils. Under the light microscope, this "polyfilamentous" characteristic of fibers is evident, and is the single most important morphological characteristic of the asbestiform habit. Asbestiform fibers are flexible

A true and correct copy of the SEM images for M68233-001 and M68233-002 is attached hereto as Exhibit E. I hereby adopt and incorporate this report into this certification as though it was set forth in full.

17. On March 7, 2018, my laboratory received two 1.5 oz. Johnson's Baby Powder containers belonging to Joanne Anderson (MAS sample numbers M68379-001, M68379-002). These containers appear to be of a more current production and talc source. As with the previously analyzed Johnson & Johnson talcum powder product, the amount of possible amphibole content of these two Johnson's Baby Powder products was expected to be at trace levels (0.1 % or less), therefore the analysis required the use of an analytical transmission electron microscope (ATEM) as described in the previous reports. Using the Blount talc density heavy liquid preparation method for these samples, our ATEM analysis showed that one of the Johnson's Baby Powder product samples (M68379-002) contained detectable amounts of amphibole asbestos (tremolite) at a concentration range of 7160 fibers/gram. A true and correct copy of the Summary Sheet and data for the Anderson containers is attached hereto as Exhibit F. I hereby adopt and incorporate the Anderson summary sheet and data into this certification as though it was set forth in full.

18. In order to determine airborne asbestos amphibole fiber exposure an individual would experience during application of Johnson & Johnson talcum powder products, my laboratory conducted a below the waist application study using Johnson's Baby Powder talc container M65205-001. Approximately 4 grams of baby powder were applied to the lower body of an investigator to determine the potential exposure levels of an individual to asbestos amphibole fibers while applying Johnson's Baby Powder. Both the NIOSH 7400 PCM method and the NIOSH 7402 TEM method were performed to determine if any detectable amphibole asbestos fibers from the Johnson's Baby Powder were released into the breathing zone of the investigator and immediate surrounding area. This study would be applicable to anyone applying talcum powder in a similar fashion to the study subject. The NIOSH 7400 PCM analysis found that the four personal sample results ranged from 3.85 f/cc to 5.86 f/cc with an average mean of 4.52 f/cc. Area air sample results were 0.28 f/cc to 0.58 f/cc with an average mean of 0.41 f/cc. Four of the personal PCM

filters were analyzed by the NIOSH 7402 TEM method and the percent tremolite asbestos fiber concentration ranged from 42.9% to 76.9% resulting in a PCM equivalent range of 1.81 f/cc to 4.51 f/cc. These results are consistent with those already in the published literature, and demonstrate that an individual who uses Johnson & Johnson talcum powder products, would be expected to have a significant exposure to airborne amphibole fibers. A true and correct copy of "MAS Project 14-1852 Below the Waist Application of Johnson & Johnson Baby Powder Supplemental Report# 2" dated January 2018 is attached hereto as Exhibit G. I hereby adopt and incorporate this report into this certification as though it was set forth in full. These exposure levels substantially exceed background exposure levels reported in the literature.

19. Based on my inspection and analyses of the products, my review of Johnson & Johnson documents, and my 30+ years of training and experience in testing and analyzing products, it is my opinion that the products analyzed were what they purported to be: authentic Johnson & Johnson talc powder products. It is my expert opinion that the contents of the products that I tested, specifically the talc and the asbestos, are what was originally in the products as manufactured and sold. Neither the age of the products, identity of their owners, nor the circumstances of their storage (heat, moisture, light ...) over the years would impact the possibility that the talc and asbestos in them were not original to Johnson & Johnson. Unlike something like a fungus or a bacteria, asbestos does not grow inside a bottle (regardless of heat, moisture, light) and talc does not degrade into asbestos as a result thereof.

20. Johnson & Johnson attorneys have repeatedly alleged that somehow the powder inside the containers MAS analyzed could have been "switched" by some unknown person for some unknown reason. This is simply not possible, much less plausible. The two explanations put forward to me by Johnson & Johnson attorneys during deposition and trial testimony for the finding of asbestos in their containers are: 1) that the original talc in the containers of Johnson's Baby Powder

and Shower to Shower was removed and replaced with some other talc (which happened to have trace levels of asbestos) or 2) that the asbestos that we found in the containers was added (either intentionally or unintentionally) to the authentic Johnson's Baby Powder and Shower-to-Shower talc products after they were manufactured and sold. This is a practical impossibility.

21. First, the appearance of the products alone precludes the possibility that someone(s) removed and replaced the original talc in the containers with some other (non-Johnson & Johnson) talc. The containers were original and authentic Johnson's Baby Powder and Shower to Shower containers; there seems to be no dispute about this. They demonstrated absolutely no evidence of having been tampered with in a way that would allow for the removal and replacement of the original talc in them. Specifically, the caps/lids on the products we tested cannot be removed by hand, and would actually leave observable evidence if they had been removed at all. On visual inspection, we did not observe any marks of evidence of removal of the caps/lids. Nevertheless, we analyzed the lids of each samples with a stereoscopic microscope for any imperfections in the plastic lids or bottles that would have been left by the prying of a tool like a screwdriver. Unsurprisingly, none were seen. Accordingly, it is clear that the products had not been opened in a manner that would allow for the replacement of the original contents of these samples.

22. The contents of all of the containers of Johnson's Baby Powder and Shower to Shower samples that we tested were also consistent with what the products purported to be, namely, cosmetic body powder, and there was nothing in the contents that would be inconsistent therewith. Likewise, the substance of the powder was consistent with Johnson's Baby Powder and Shower to Shower products. They were predominantly cosmetic grade talc and had trace amounts of the types of asbestos that, based on my review of several hundred Johnson & Johnson historical documents, have been present in these products consistently since the 1950's.

23. With regard to the products' internal patterns, I conducted a comparative particle size distribution analysis between the samples that tested positive for asbestos and a contemporary ("control") sample of Johnson's Baby Powder that we bought off the shelf. We found that the particle size distribution was consistent among and between the contemporary "control" sample and the all of the vintage samples; and consistent with Johnson & Johnson's own particle size specifications. A true and correct copy of our Talc Size Distribution report, dated August 21, 2017, is attached hereto as Exhibit C. I hereby adopt and incorporate that report into this certification as though it was set forth in full. The consistency of the particle size distribution shows these products to be the same from one to another and it is my opinion that it is highly improbable that some other talc manufacture' s product was somehow added to the exclusion of the Johnson & Johnson talc inside the bottle. In fact, an article authored by executives of Johnson & Johnson and it's talc supplier regarding talc used in various cosmetics (e.g., lipsticks, antiperspirant sticks, body powders, ...) states clearly "[t]hat particle size of the talc raw material used in these products varies widely by product type and by manufacturer."

24. Based on the above, all four of these factors (appearance, contents, substance, and internal patterns of the products) taken together exclude the possibility that someone(s) removed and replaced the original talc in the containers that we tested with some other (non-Johnson & Johnson) talc. There is simply no evidence of intentional tampering or outside contamination.

25. Second, it has also been hypothesized that, even if the samples we tested were original as manufactured and sold by the Johnson & Johnson companies, they were contaminated post-sale (either intentionally or unintentionally) with the asbestos that we found in them. Both of these scenarios are so implausible so as to be virtually impossible.

26. For each set of Johnson & Johnson talc samples that were prepared and analyzed at this laboratory, a process laboratory blank was prepared simultaneously to determine if there was

any cross-contamination originating in our lab. When these process laboratory blanks were analyzed by TEM, no asbestos, including tremolite or chrysotile structures, were found. Therefore, it can be stated, that there was no cross-contamination during sample preparation of the Johnson & Johnson talc samples we analyzed. In addition, and especially because contaminating tremolite asbestos could not get into the containers through the lids/caps of the bottles/containers of the products we tested (due to the features of the container lids described above), we concluded that tremolite asbestos could not have inadvertently become a part of these homogenized talc products at the level identified as a result of contamination prior to our custody.

27. As for the possibility of intentional post sale contamination, in order for the talc in the Johnson & Johnson product containers to be contaminated with trace amounts of tremolite in a homogeneous manner prior to our custody, it would require an extremely sophisticated operation as might be found in a TEM materials laboratory facility. For example, the tremolite contamination talc operation would require access to a true tremolite standard, an analytical balance and sophisticated mixing equipment to homogenize both the talc and tremolite together. Also, it would require sophisticated TEM analytical analysis to verify that the trace amounts of tremolite fibers in the manufactured tremolitic talc product were consistent with what is expected for this type of material. Lastly, the finished material would have to be put back into the original Johnson & Johnson talc containers, and then be distributed around the country to individuals willing to sell “fake” contaminated talc containers on eBay and to patients with mesothelioma to pass off as their own. Given the incredible unlikelihood of there being such a conspiracy and it being successful, to suggest that the tremolite fibers we detected in the Johnson & Johnson talc samples came from some source, other than from the Johnson & Johnson talc itself, is not a scientifically rational argument.

28. Further, my laboratory's findings of amphibole asbestos in the containers received from law firms and their clients, as well as the concentrations in which the amphiboles were found, are consistent with the finding of amphibole asbestos in the two samples of 1978 Johnson's Baby Powder received from Johnson & Johnson.

29. Based upon my analyses of the products, my review of historic Johnson and Johnson documents and my years of training and experience, it is my expert opinion that it is virtually impossible that either the original talc in the containers of Johnson's Baby Powder and Shower to Shower was removed and replaced with some other talc (which happened to have trace levels of asbestos); or that the asbestos that we found in the containers was added (either intentionally or unintentionally) to the authentic Johnson's Baby Powder and Shower to Shower talc products after they were manufactured and sold.

30. As addressed in my reports, I reiterate that of the thirty-five original talc containers tested by analytical transmission electron microscopy (ATEM), twenty samples were found to contain detectable amounts of amphibole asbestos. For the seventeen positive samples originally reported on in August 2017, amphibole fiber concentrations ranged from 8,690 fibers/gram to 15,100,000 fibers/gram. The additional container of Johnson's Baby Powder received from the Lanier Law Firm and included in the March 2018 supplemental report was also found to contain tremolite asbestos. Further, the two samples of 1978 Johnson's Baby Powder received from Johnson & Johnson taken from the 1978 container contained detectable amounts of amphibole asbestos (ferro-anthophyllite) at a concentration range of between 7,240 fibers/gram to 22,100 fibers/gram while the Joanne Anderson container of Johnson's Baby Powder contained detectable amounts of amphibole asbestos (tremolite) at a concentration of 7,160 fibers/gram.

31. Based on our own testing, as well as my review of historic testing of the talc ore and Johnson & Johnson finished talc products, it is my opinion to a reasonable degree of scientific

certainty that individuals who used Johnson's Baby Powder or Shower to Shower talc products would have, more likely than not, been exposed to fibrous amphibole asbestos. It is further my opinion that ambient or background air does not contain measurable amounts of airborne anthophyllite or tremolite type fibers, unless there is an identifiable source for those fibers. Therefore any exposure to either the tremolite amphibole asbestos series or ferro-anthophyllite asbestos found in these products would be substantially above background. Accordingly, it is my opinion that the asbestos exposure to individuals who used Johnson's Baby Powder or Shower to Shower talc products was substantial and well above background or ambient levels.

32. I have also reviewed Johnson & Johnson's internal TEM Method for the Detection of Asbestiform Minerals (TM 7024) in order to determine if its "limit of detection" allowed considerable amounts of asbestos to pass as "below the limit of detection." Because the method has set its Limit of Quantifiable Detection at "five or more asbestiform minerals of one variety," this allows the analyst to conclude that a sample is "below the limit of quantifiable detection" even if asbestos fibers are seen in a sample; meaning that asbestos fibers observed are unreported, i.e., not communicated. The table below lists various possible findings for the presence of asbestos fibers that details how much asbestos would be present in samples that Johnson & Johnson's TM 7024 would call "Below Detection Limit."

Total Number of Asbestos Fibers found in 10 Grid Openings Examined	Total Asbestos Fiber Concentration Present At Said Number of Asbestos Fibers Found
4 Tremolite fibers	56,800,000 asbestos fibers
4 Tremolite fibers 4 Anthophyllite fibers	113,600,000 asbestos fibers
4 Tremolite fibers 4 Anthophyllite fibers 4 Actinolite fibers	170,400,000 asbestos fibers
4 Tremolite fibers 4 Anthophyllite fibers 4 Actinolite fibers 4 Chrysotile fibers	227,200,000 asbestos fibers

33. I conclude that TM 7024 was designed in such a way as to allow substantial amounts of observed asbestos in talc to pass through as "below detection limit."

I hereby certify that the foregoing statements made by me are true. I am aware that if any of the foregoing statements made by me are willfully false, I am subject to punishment.

Executed on July 3rd, 2018.

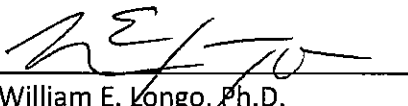

William E. Longo, Ph.D.

Exhibit 33

1 IN THE UNITED STATES DISTRICT COURT

2 FOR THE DISTRICT OF NEW JERSEY

3 IN RE: : MDL NO.:

JOHNSON & JOHNSON TALCUM : 16-2738 (MAS)(RLS)

4 POWDER PRODUCTS :

MARKETING, SALES :

5 PRACTICES, AND PRODUCTS :

LIABILITY LITIGATION :

6
7 - - -

8 Wednesday, July 10, 2024

9 - - -

10 Remote videotaped deposition of PAUL
11 HESS, via Zoom video conference, conducted at
12 the location of the witness in Atlanta,
13 Georgia, taken on the above date, beginning at
14 approximately 9:06 a.m., before Jessica M.
15 Gericke, RPR, CCR-NJ, and Notary Public in and
16 for Delaware, New Jersey, and Pennsylvania.

<p>Page 2</p> <p>1 APPEARANCES VIA ZOOM VIDEO CONFERENCE: 2 BOVIS, KYLE, BURCH & MEDLIN, LLC BY: ERIC LUDWIG, ESQUIRE 3 200 Ashford Center North Suite 500 4 Atlanta, GA 30338-2668 678-338-3925 5 eludwig@boviskyle.com (Present with Witness) 6 Counsel for Deponent and Materials 7 Analytical Services 8 BEASLEY, ALLEN, CROW, METHVIN, 9 PORTIS & MILES, P.C. BY: P. LEIGH O'DELL, ESQUIRE 10 218 Commerce Street Montgomery, AL 36104 11 334-269-2343 leigh.odell@beasleyallen.com 12 (Present with Witness) 13 Counsel for Plaintiff Steering Committee 14 COHEN, PLACITELLA & ROTH 15 BY: CHRISTOPHER M. PLACITELLA, ESQUIRE DREW M. RENZI, ESQUIRE 16 127 Maple Avenue Red Bank, NJ 07701 17 732-747-9003 cplacitella@cpirlaw.com 18 Counsel for Plaintiff Steering Committee 19 20 21 22 23 24 25</p>	<p>Page 4</p> <p>1 APPEARANCES (continued): 2 ALSO PRESENT: 3 SPECIAL MASTER JOEL SCHNEIDER 4 CAROLIN De La ROSA, VIDEOGRAPHER 5 SHU-CHUN SU, PH.D. 6 - - - 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25</p>
<p>Page 3</p> <p>1 APPEARANCES (continued): 2 ASHCRAFT & GEREL, LLP BY: MICHELLE A. PARFITT, ESQUIRE 3 1824 K Street NW Washington, DC 20006 4 202-669-0032 mparfitt@ashercraftlaw.com 5 Counsel for Plaintiff Steering Committee 6 REILLY, McDEVITT & HENRICH, P.C. 7 BY: BRANDY L. HARRIS, ESQUIRE 8 3 Executive Campus Suite 310 9 Cherry Hill, NJ 08002 856-317-7180 10 bharris@rmh-law.com 11 Counsel for Personal Care Products Council 12 KING SPALDING, LLP 13 BY: MORTON D. DUBIN, II, ESQUIRE KEVIN HYNES, ESQUIRE 14 JAKE KEESTER, ESQUIRE 1185 Avenue of the Americas 15 34th Floor New York, NY 10036 16 212-790-5343 mdubin@kslaw.com 17 Counsel for Defendant Johnson & Johnson 18 FAEGRE DRINKER BIDDLE & REATH LLP 19 BY: SUSAN M. SHARKO, ESQUIRE 20 600 Campus Drive Florham Park, NJ 07932 21 973-549-7000 susan.sharko@faegredrinker.com 22 Counsel for Defendant Johnson & Johnson 23 24 - - - 25</p>	<p>Page 5</p> <p>1 INDEX 2 WITNESS NAME PAGE 3 Paul Hess 4 By Mr. Dubin 6 5 6 - - - 7 8 EXHIBITS 9 NO. DESCRIPTION PAGE 10 1 Resume of Paul M. Hess 8 11 2 MAS Report, dated 20 February 24, 2020 12 3 MAS Report, dated February 22 13 1, 2019 14 4 Hess Slide 2 46 15 5 MAS Report, dated September 58 16 16, 2020 17 6 MAS report, dated February 64 17 24, 2020 18 7 Declaration of William 69 Longo, Ph.D. 19 8 Hess Slide 20 70 20 9 Hess Slide 22 74 21 10 Hess Slide 24 76 22 11 Hess Slide 25 81 23 12 J3 Resources Inc. Report, 83 24 dated July 13, 2018 25</p>

<p style="text-align: right;">Page 6</p> <p>1 INDEX (continued):</p> <p>2 13 MAS Report, dated April 13, 87 2021</p> <p>3</p> <p>4 14 MAS Report, dated February 91 28, 20</p> <p>5 15 Hess Slide 34 105</p> <p>6 16 Su Tables 108</p> <p>7 17 Hess Slide 43 110</p> <p>8 18 Hess Slide 127</p> <p>9 19 Hess Slide 134</p> <p>10 20 Image, CX-00056 137</p> <p>11 21 CX-00012 143</p> <p>12 22 Hess Slide 48 143</p> <p>13 23 Image, CX-00062 147</p> <p>14 24 Image, CX-00019 164</p> <p>15 25 Image, CX-00029 169</p> <p>16 26 William E. Longo, Ph.D., 176 Deposition Transcript, dated March 22, 2024</p> <p>17</p> <p>18 27 Hess Slide 95 178</p> <p>19 ---</p> <p>20</p> <p>21</p> <p>22</p> <p>23</p> <p>24</p> <p>25</p>	<p style="text-align: right;">Page 8</p> <p>1 have received from you or at least I assume it</p> <p>2 originated with you and we'll just call that</p> <p>3 up and walk a little bit through your</p> <p>4 employment background.</p> <p>5 MR. DUBIN: Jake, can we call</p> <p>6 that up, please?</p> <p>7 (Exhibit 1 marked for</p> <p>8 identification.)</p> <p>9 BY MR. DUBIN:</p> <p>10 Q. So it looks like you joined MAS in</p> <p>11 December of 1995; is that correct?</p> <p>12 A. Yes, sir.</p> <p>13 Q. Okay. Can you tell me very briefly</p> <p>14 what this position was that you held before</p> <p>15 that at Law Associates?</p> <p>16 A. PLM microscopist.</p> <p>17 Q. And what was -- what is or was Law</p> <p>18 Associates?</p> <p>19 A. They were an engineering firm in</p> <p>20 Atlanta, Georgia.</p> <p>21 Q. Okay. Do you know why it has "law"</p> <p>22 in the name?</p> <p>23 A. I have no idea.</p> <p>24 Q. Okay. Does that have anything to do</p> <p>25 with something legal or is it just -- was it</p>
<p style="text-align: right;">Page 7</p> <p>1 ---</p> <p>2 VIDEOGRAPHER: We are now on</p> <p>3 the record. My name is Carolin De La Rosa, a</p> <p>4 videographer for Golkow Litigation Services.</p> <p>5 Today's date is July 10, 2024, and the time is</p> <p>6 9:06 a.m. This deposition is being held in</p> <p>7 the matter of Talcum Powder litigation MDL</p> <p>8 2738 versus Johnson & Johnson. The deponent</p> <p>9 today is Paul Hess.</p> <p>10 All parties to this deposition</p> <p>11 are appearing remotely and have agreed for the</p> <p>12 witness to be sworn in remotely. All parties</p> <p>13 are noted on the stenographic record this</p> <p>14 morning.</p> <p>15 Would the court reporter,</p> <p>16 please, administer the oath to the witness.</p> <p>17 ---</p> <p>18 PAUL HESS, after having been</p> <p>19 first duly sworn, was examined and</p> <p>20 testified as follows:</p> <p>21 BY MR. DUBIN:</p> <p>22 Q. Hi, Mr. Hess. Good morning.</p> <p>23 A. Good morning.</p> <p>24 Q. So we're going to make the first</p> <p>25 exhibit to your deposition a resume that I</p>	<p style="text-align: right;">Page 9</p> <p>1 somebody's name? You have no idea?</p> <p>2 A. No idea, sir.</p> <p>3 Q. Okay. And then it looks like you</p> <p>4 departed MAS in August of 2008 for a fairly</p> <p>5 short period and went to Long Brothers Oil &</p> <p>6 Gas; is that right?</p> <p>7 A. That is correct.</p> <p>8 Q. Okay. And then you went back to MAS</p> <p>9 and you were there until February of 2023, as</p> <p>10 a full-time employee, before leaving for a</p> <p>11 brief period of a year where you were just a</p> <p>12 consultant; is that right?</p> <p>13 A. That is correct.</p> <p>14 Q. Okay. And then your current</p> <p>15 employment status at MAS is what?</p> <p>16 A. Part-time.</p> <p>17 Q. Okay. And looking through your</p> <p>18 resume, it looks like you have a bachelor's of</p> <p>19 science degree; is that correct?</p> <p>20 A. That is correct.</p> <p>21 Q. You don't have any further advanced</p> <p>22 degrees, right, no master's and no Ph.D.?</p> <p>23 A. No, sir.</p> <p>24 Q. Okay. I am sorry. Sometimes it can</p> <p>25 be confusing.</p>

<p style="text-align: right;">Page 10</p> <p>1 It's correct you do not have a 2 master's or a doctorate; is that right? 3 A. That is correct. 4 Q. Thank you. All right. So we may go 5 through some of that in more depth later, but 6 what is -- what positions have you held over 7 time at MAS? 8 A. PLM microscopist. 9 Q. I have heard you referred to 10 sometimes as an analyst. 11 Is that the name of your 12 position, is PLM microscopist the name of your 13 position or what's the formal name of your 14 position? 15 A. To the best of my knowledge, it's 16 PLM microscopist. 17 Q. Okay. That's fine. And are you 18 represented by counsel today? 19 A. I am. 20 Q. Okay. And is that your personal 21 counsel? Was it provided to you by MAS? 22 A. Provided by MAS. 23 Q. Okay. And it says here that you 24 have 34 years experience as a PLM 25 microscopist, analyzing an average of 10,000</p>	<p style="text-align: right;">Page 12</p> <p>1 You have only become involved 2 in litigation work within the last few years; 3 is that right? 4 A. That is correct. 5 Q. Okay. And since becoming involved 6 with litigation work, about what percentage of 7 your time or your work at MAS relates to 8 litigation -- is related to litigation? 9 MR. LUDWIG: Objection to form. 10 You can answer. 11 THE WITNESS: I would say the 12 majority of the time. 13 BY MR. DUBIN: 14 Q. Can you explain to me when and how 15 you started to become involved with litigation 16 work? 17 A. I do not recall the exact year, but 18 Dr. Longo asked me to start taking a look at 19 amphiboles in talc samples. 20 Q. And so you started -- they asked you 21 to take a look by PLM for amphiboles in talc 22 samples; is that right? 23 A. That is right. 24 Q. Okay. Did you have any discussion 25 at that time about whether you should also</p>
<p style="text-align: right;">Page 11</p> <p>1 samples per year. 2 When you say that, are most of 3 the samples asbestos samples or is that a 4 variety of different types of PLM work? 5 A. Most of those were standard asbestos 6 samples. 7 Q. Okay. And so is it correct to say 8 that your general job duties at MAS is just 9 PLM microscopy? 10 A. That is correct. 11 Q. Do you do any other type of 12 microscopy work at MAS? 13 A. I had done some phase contrast. 14 Q. No transmission electron microscopy; 15 is that right? 16 A. No, sir. 17 Q. Okay. And do you know approximately 18 what percentage of your time at MAS is spent 19 performing work related to litigation? 20 MR. LUDWIG: Objection to form. 21 BY MR. DUBIN: 22 Q. You can respond. 23 A. Just the last few years. 24 Q. Okay. So let me make sure I 25 understand what you're saying.</p>	<p style="text-align: right;">Page 13</p> <p>1 look for chrysotile? 2 A. Not that I recall. 3 Q. Okay. Did you ask why you were only 4 being -- being asked to look for amphiboles at 5 that time? 6 A. Not that I recall. 7 Q. Okay. When you typically perform a 8 PLM analysis, let's say, before you became 9 involved in this litigation work, when you 10 were examining a sample, would you typically 11 look for both chrysotile and for amphiboles? 12 A. In the standard samples, that is 13 correct. 14 Q. So you -- when you first became 15 involved with looking at, let's say, talcum 16 powder samples, why didn't you continue to 17 follow that protocol and look for both 18 amphibole and chrysotile? 19 MR. LUDWIG: Objection to form. 20 THE WITNESS: At that time it 21 was basically just for the amphiboles. I was 22 not asked to look for the chrysotile. 23 BY MR. DUBIN: 24 Q. Okay. And at some point you were 25 asked to start looking for chrysotile in</p>

4 (Pages 10 - 13)

<p style="text-align: right;">Page 14</p> <p>1 cosmetic talc samples; is that right?</p> <p>2 A. I was asked to see what I could find</p> <p>3 other than the amphiboles.</p> <p>4 Q. Okay. And do you recall when</p> <p>5 approximately that was?</p> <p>6 A. I do not recall.</p> <p>7 Q. Prior to becoming involved with</p> <p>8 litigation work in the last several years, had</p> <p>9 you ever previously examined talc, whether</p> <p>10 industrial or cosmetic, for the presence of</p> <p>11 asbestos by PLM?</p> <p>12 A. Not that I recall.</p> <p>13 Q. Okay. When was the first time you</p> <p>14 recall being involved with the testing of talc</p> <p>15 at MAS, irrespective of whether it was</p> <p>16 cosmetic or industrial?</p> <p>17 MS. O'DELL: Would you repeat</p> <p>18 the question, please?</p> <p>19 BY MR. DUBIN:</p> <p>20 Q. Sure. When was the first time you</p> <p>21 recall becoming involved with the testing of</p> <p>22 talc for asbestos at MAS, irrespective of</p> <p>23 whether it was cosmetic talc or industrial</p> <p>24 talc?</p> <p>25 A. As I recall, it was somewhere around</p>	<p style="text-align: right;">Page 16</p> <p>1 A. Ceiling tiles, joint compounds,</p> <p>2 roofing, putties, floor tiles. A whole</p> <p>3 spectrum of different types of building</p> <p>4 materials.</p> <p>5 Q. And so do you recall being able to</p> <p>6 identify chrysotile by PLM in products such as</p> <p>7 joint compounds and floor tiles?</p> <p>8 A. Yes, sir.</p> <p>9 Q. And do you know what type or types</p> <p>10 of chrysotile asbestos -- well, let me ask you</p> <p>11 a different question.</p> <p>12 Do you recall any of the brand</p> <p>13 names of the joint compounds that you looked</p> <p>14 at?</p> <p>15 A. I don't recall any brand names being</p> <p>16 given by the clients that sent the samples in.</p> <p>17 Q. Do you know whether any of those</p> <p>18 joint compounds or floor tiles would have</p> <p>19 contained Calidria asbestos?</p> <p>20 A. Not that I recall; however, I did at</p> <p>21 one point come to the understanding that</p> <p>22 Calidria had been used in some of the floor</p> <p>23 tiles.</p> <p>24 Q. Okay. And you were able to identify</p> <p>25 chrysotile in those floor tiles using PLM?</p>
<p style="text-align: right;">Page 15</p> <p>1 2018.</p> <p>2 Q. Have you looked at both industrial</p> <p>3 and cosmetic talc by PLM for the presence of</p> <p>4 asbestos?</p> <p>5 A. I don't recall industrial.</p> <p>6 Q. Okay. Do you recall when the first</p> <p>7 time was that you used -- and we'll talk more</p> <p>8 about what this means -- but a 1.550</p> <p>9 refractive index oil to examine talc,</p> <p>10 irrespective of whether it's cosmetic or</p> <p>11 industrial talc?</p> <p>12 A. 1.550 has always been the oil used</p> <p>13 since doing standard things or standard</p> <p>14 samples, I should say.</p> <p>15 Q. So over -- but do you recall when</p> <p>16 the first time you used that oil to examine</p> <p>17 talc was?</p> <p>18 A. I don't recall exactly.</p> <p>19 Q. Okay. You indicated before -- we</p> <p>20 talked about the fact that you had experience</p> <p>21 as a PLM microscopist looking at many</p> <p>22 different samples over your career.</p> <p>23 Can you tell me what type or</p> <p>24 types of asbestos-containing products you</p> <p>25 recall examining by PLM over your history?</p>	<p style="text-align: right;">Page 17</p> <p>1 A. Yes, sir.</p> <p>2 Q. All right. We'll talk a little bit</p> <p>3 more about that later.</p> <p>4 Are you the -- how many PLM</p> <p>5 analysts have -- during the time you have been</p> <p>6 there, have typically been employed by MAS?</p> <p>7 A. I do not know exactly how many.</p> <p>8 Q. Were there others besides you?</p> <p>9 A. There were.</p> <p>10 Q. Okay. Let's say within the last</p> <p>11 three years, how many other PLM analysts do</p> <p>12 you recall working at MAS?</p> <p>13 A. One other besides myself.</p> <p>14 Q. And who was that?</p> <p>15 A. That was Christopher Dubois.</p> <p>16 MR. LUDWIG: Mr. Dubin, can I</p> <p>17 ask you a question? Are you finished with the</p> <p>18 resume? Because it's still up on the screen.</p> <p>19 I didn't know if you were --</p> <p>20 MR. DUBIN: We can pull it down</p> <p>21 for now; that's fine.</p> <p>22 BY MR. DUBIN:</p> <p>23 Q. And was that individual trained in</p> <p>24 PLM dispersion staining analysis?</p> <p>25 A. Yes, sir.</p>

5 (Pages 14 - 17)

<p style="text-align: right;">Page 18</p> <p>1 Q. Was there anything about his 2 training that would lead you to believe he 3 wasn't trained to look for chrysotile by PLM? 4 MR. LUDWIG: Objection to form; 5 calls for speculation. 6 BY MR. DUBIN: 7 Q. To your knowledge. 8 A. I do not recall. 9 Q. Okay. We'll come back to some 10 background later, but what did you do to 11 prepare for your deposition today? 12 A. I had a few sessions with 13 Mr. Ludwig. 14 Q. Anything else? Did you speak to 15 anybody else in preparation for your 16 deposition? 17 A. Ms. O'Dell. 18 Q. Okay. How about Dr. Longo? 19 A. Dr. Longo has been very busy the 20 last couple of weeks or so and I have not had 21 an opportunity to sit down and talk with him. 22 Q. Okay. Did you review any materials 23 to prepare for your deposition? 24 A. I did review the reports by Dr. Su 25 and Dr. Wylie.</p>	<p style="text-align: right;">Page 20</p> <p>1 number is CX-6 for pulling it up. It's a 2 report, dated February 24, 2020, related to 3 Zimmerman, the Zimmerman report. 4 (Exhibit 2 marked for 5 identification.) 6 BY MR. DUBIN: 7 Q. I don't know that you -- whether you 8 personally recall. 9 Do you recall this being the 10 first time you looked at cosmetic talc from 11 Johnson & Johnson by PLM for the presence of 12 chrysotile? 13 A. I don't recall. 14 Q. Okay. We'll look at that report 15 some, but before I do that, I want to look at 16 something else. 17 Did you become aware at some 18 point that the FDA had reported a positive 19 finding for chrysotile by TEM in a bottle of 20 Johnson & Johnson? 21 MR. LUDWIG: Objection to form. 22 Just for the record, Mr. Hess 23 is a fact witness that we produced because of 24 Court Order. He is not here to opine on 25 expert issues or hearsay issues.</p>
<p style="text-align: right;">Page 19</p> <p>1 Q. Okay. Did you review any of your 2 own PLM analysis? 3 A. I did not go back over and review 4 any of the PLM analysis. 5 Q. How are you compensated at MAS? Are 6 you a salaried employee? 7 A. Currently, I am hourly. 8 Q. Okay. How about before you -- 9 before you took the recent break and became a 10 consultant? Were you salaried at that time? 11 A. I was. 12 Q. Do you -- in your current structure, 13 do you receive bonuses? 14 A. No, sir. 15 Q. How about before, when you were a 16 salaried employee? Did you receive bonuses? 17 A. A long time ago the company used to 18 have an annual bonus that they would give out, 19 but that has not been in place for many years. 20 MR. DUBIN: Okay. I'm going to 21 mark as the next exhibit -- and start to get 22 into a little bit of substance -- what I 23 understand to be the first report that MAS 24 issued claiming to find chrysotile by PLM, and 25 that will be exhibit 2, internal reference</p>	<p style="text-align: right;">Page 21</p> <p>1 MR. DUBIN: I don't know what 2 you're saying, but I am sure I disagree with 3 it. So let's just see how it goes with 4 individual questions. Because I am definitely 5 going to be asking him about his work. 6 MR. LUDWIG: You're asking 7 about FDA analysis and so I am going to object 8 to the form. 9 MR. DUBIN: Okay. Well, you 10 can object if you like, but you can respond. 11 Thank you. 12 BY MR. DUBIN: 13 Q. Did you become aware of that at some 14 point? 15 A. I am aware of that. 16 Q. Okay. Do you recall how you became 17 aware of that? 18 A. I don't recall exactly. 19 Q. Do you recall ever reporting 20 chrysotile in any Johnson & Johnson talc 21 samples prior to that FDA finding? 22 A. I do not. 23 Q. Now, what -- what type of refracted 24 index oil would you use traditionally to look 25 for fibrous talc by PLM?</p>

<p style="text-align: right;">Page 22</p> <p>1 A. 1.550.</p> <p>2 Q. Would there be any difference in</p> <p>3 your prep method in the way that you would</p> <p>4 have traditionally looked for fibrous talc</p> <p>5 versus chrysotile asbestos in 1.550?</p> <p>6 A. It would be no different in method</p> <p>7 of preparation.</p> <p>8 Q. It makes no difference to the method</p> <p>9 of preparation? Is that what you said?</p> <p>10 A. No. I said there is no difference</p> <p>11 in preparation between the two types of</p> <p>12 analyses.</p> <p>13 Q. All right. And so I want to ask you</p> <p>14 about another report before we go forward, one</p> <p>15 that was issued before Zimmerman; that will be</p> <p>16 exhibit 3. It's a February 1, 2019 report</p> <p>17 entitled: MAS Second Supplemental Report.</p> <p>18 Let's pull that up for a second.</p> <p>19 (Exhibit 3 marked for</p> <p>20 identification.)</p> <p>21 BY MR. DUBIN:</p> <p>22 Q. This is a report that was issued by</p> <p>23 MAS prior to the FDA finding.</p> <p>24 It's entitled: An Analysis of</p> <p>25 Johnson & Johnson Historical Product</p>	<p style="text-align: right;">Page 24</p> <p>1 highlight it.</p> <p>2 MS. O'DELL: If you can't see</p> <p>3 it, Dr. -- excuse me. If you can't see it,</p> <p>4 Mr. Hess, please let us know.</p> <p>5 MR. DUBIN: Jake, can you put</p> <p>6 these things in chat, too?</p> <p>7 MR. PLACITELLA: Well, I want</p> <p>8 the opportunity to look at the document before</p> <p>9 you start asking questions about it.</p> <p>10 MR. LUDWIG: I mean, the report</p> <p>11 speaks for --</p> <p>12 MR. DUBIN: (Inaudible.)</p> <p>13 MR. LUDWIG: -- themselves --</p> <p>14 indicating one question or -- so the whole</p> <p>15 thing speaks for itself, Paul. I guess his</p> <p>16 only --</p> <p>17 MR. DUBIN: Okay. This is a</p> <p>18 long speaking objection, it's improper, and I</p> <p>19 am going to -- I am trying to show him things</p> <p>20 to be able to ask him a question about it.</p> <p>21 We can put these things in</p> <p>22 chat, but I am not pausing at every question</p> <p>23 to wait for you to read a 100-page report. So</p> <p>24 that's just not happening. We're going to --</p> <p>25 MS. O'DELL: Well, it will</p>
<p style="text-align: right;">Page 23</p> <p>1 Containers and Imerys' Historical Railroad Car</p> <p>2 Samples from the 1960s to the early 2000s, for</p> <p>3 Amphibole Asbestos, and if we --</p> <p>4 MS. O'DELL: Morty, could you</p> <p>5 put the whole document on the screen so it can</p> <p>6 be seen? I am only seeing the first part.</p> <p>7 MR. DUBIN: I mean, I am going</p> <p>8 to move around the document. We can try to</p> <p>9 adjust so you can see the full size.</p> <p>10 Can you see it now?</p> <p>11 MS. O'DELL: Yes. If you can</p> <p>12 maybe make it a bit bigger? Because I am</p> <p>13 looking for the date on that because I can't</p> <p>14 see it.</p> <p>15 MR. DUBIN: It's dated February</p> <p>16 1, 2019.</p> <p>17 MS. O'DELL: Thank you.</p> <p>18 BY MR. DUBIN:</p> <p>19 Q. And if we go to page 2, you can see</p> <p>20 here that it relates to 72 J&J and</p> <p>21 Imerys-supplied historical cosmetic talcum</p> <p>22 powder containers, samples, and samples from</p> <p>23 the 1960s, 1970s, 1980s, 1990s, and early</p> <p>24 2000s.</p> <p>25 Do you see that? I can</p>	<p style="text-align: right;">Page 25</p> <p>1 happen if the witness needs it, Morty, and</p> <p>2 we'll go off the record if he needs --</p> <p>3 MR. DUBIN: I haven't -- I</p> <p>4 haven't asked a single question yet, other</p> <p>5 than whether he sees it. So we're not at --</p> <p>6 MS. O'DELL: Morty, I am not</p> <p>7 finished and you can let me finish.</p> <p>8 It's not fair to put a document</p> <p>9 on the screen without giving him the</p> <p>10 opportunity to see it. Thank you for putting</p> <p>11 it in the chat. He can pull it down in the</p> <p>12 chat and they will be printed if needed --</p> <p>13 MR. DUBIN: (Inaudible.)</p> <p>14 MS. O'DELL: -- examination.</p> <p>15 You could have sent the</p> <p>16 documents in hard copy had you chosen. You</p> <p>17 didn't do that; that's fine. We'll work</p> <p>18 around that, but he needs the opportunity to</p> <p>19 review the document.</p> <p>20 MR. DUBIN: If you guys want to</p> <p>21 go off record, he can read each time. I am</p> <p>22 not using my time to have him read a whole</p> <p>23 report when I haven't been able to ask a</p> <p>24 single question about it.</p> <p>25 So if you want to go off, off</p>

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<p style="text-align: right;">Page 26</p> <p>1 record, and have him read the whole report, I 2 am happy to let him do that, or I can direct 3 him to the portions that I am going to ask 4 about. You choose. Because we can be here 5 all night. I don't care. So you tell me. 6 MR. LUDWIG: We're not going to 7 off the record, no. It sounds like -- 8 MR. DUBIN: It is not going on 9 my time if he wants to read a 50-page document 10 that I haven't been able to ask a single 11 question about yet. This is not happening. 12 So you want to go off the 13 record and have him read this report or you 14 want me to ask him questions and then the 15 witness can tell me if there is something he 16 needs to read. 17 Those are your two options. 18 MS. O'DELL: You don't -- 19 MR. PLACITELLA: The third 20 option is -- the third option is we're going 21 to call the Special Master. Because we have a 22 right to know what's in the document -- 23 MR. DUBIN: It's in the 24 document -- 25 MR. PLACITELLA: -- before you</p>	<p style="text-align: right;">Page 28</p> <p>1 get the Judge on the phone -- 2 MR. DUBIN: -- get the Judge on 3 the line, we can get the Judge on the line. 4 Go ahead. Go ahead. 5 MR. PLACITELLA: Let's get the 6 judge on the phone. 7 MR. DUBIN: Fine. 8 THE COURT REPORTER: Would you 9 like to go off the record for a moment? 10 MR. DUBIN: Sure. We'll go off 11 the record. 12 VIDEOGRAPHER: The time is 13 9:32 a.m. We are off the record. 14 (Brief recess.) 15 (Conference with Special Master 16 Joel Schneider taken off the video 17 record.) 18 THE COURT: Am I looking at the 19 infamous Paul Hess? 20 THE WITNESS: You are, sir. 21 THE COURT: Mr. Hess, I have 22 read so much about you. I am delighted to 23 meet you in person. 24 MS. O'DELL: Judge Schneider, 25 here is the issue that we're facing and I</p>
<p style="text-align: right;">Page 27</p> <p>1 ask the question. So if that's how we're 2 going to proceed, by picking pieces of a 3 document that he hasn't seen for years and I 4 have never seen before, then we've got to get 5 the Judge on the phone now. 6 MR. DUBIN: Okay. We can do 7 whatever you want. You guys have been 8 complaining about this without me asking a 9 single question about the document. The 10 witness hasn't said he needs to look at 11 anything else. You're just being 12 obstructionists. I am going to -- 13 MR. PLACITELLA: Well, let's 14 get the Judge on the phone. 15 MR. LUDWIG: He has not 16 reviewed the MAS reports. So -- 17 MR. DUBIN: This is his work. 18 I am asking him about his work. 19 MS. O'DELL: This is the report 20 of Dr. Bill Longo and Mark Rigler. This is -- 21 so -- 22 MR. DUBIN: With his PLM work. 23 I am not arguing about it anymore. I am 24 asking the questions. If you want to -- 25 MR. PLACITELLA: Well, let's</p>	<p style="text-align: right;">Page 29</p> <p>1 invite Mr. Placitella to add if I don't cover 2 something, but as you know, Mr. Hess is a fact 3 witness, he is not an expert, and he has done 4 work at MAS Lab for purposes of Dr. Longo 5 rendering his expert opinion. 6 He is being shown reports by 7 Dr. Longo and Rigler. He has not -- this 8 is -- he has no involvement in the preparation 9 of the reports. His work is an underlying 10 analyst and we object to Mr. Hess being 11 examined on the full scope of Dr. Longo's 12 reports, which are not his work. 13 And so we believe -- we just 14 got started a bit ago. We think this is going 15 to be sort of the mode of the deposition and 16 we need direction from the Court as to how 17 this should be approached. 18 MR. DUBIN: Just so I can -- 19 MR. PLACITELLA: Could I 20 supplement that? 21 MS. O'DELL: Please. 22 MR. PLACITELLA: So my concern, 23 your Honor, is as follows. These are reports 24 from other cases. The witness either has 25 never seen them before or hasn't seen them for</p>

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1 many years.
2 Questions are being asked about
3 these reports that we have not been supplied
4 in advance of the deposition. Sticking them
5 in the chat now on a 30-page report from
6 another case doesn't give counsel even an
7 opportunity to determine whether the questions
8 are taken out of context, are fair or even
9 relevant. So we're not even in a position to
10 phrase our objections appropriately.
11 If they wanted to ask questions
12 about these reports, they should have been
13 sent long in advance of the deposition and we
14 could have had a debate about it then, not
15 now, when now they are going to claim every
16 time Mr. Hess has to stop and look at the
17 report, that somehow that counts -- it doesn't
18 count on their time for completing this
19 deposition.
20 It's an unfair way to proceed.
21 It was never contemplated by the Court and I
22 am at a loss as to how to even address these
23 circumstances. I mean, this is a tenuous
24 deposition at best and now we're taking it
25 into a whole different realm, which is

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1 completely unfair to counsel and the witness.
2 MR. DUBIN: If I could briefly
3 respond. Your Honor, I haven't asked --
4 THE COURT: One second.
5 MR. DUBIN: Sure.
6 THE COURT: You represent the
7 defendants, I assume?
8 MR. DUBIN: Yeah.
9 THE COURT: Who are who?
10 MR. DUBIN: I am Morton Dubin.
11 THE COURT: With what firm?
12 MR. DUBIN: I am with King &
13 Spalding.
14 THE COURT: And Mr. Hess is
15 physically where?
16 MR. DUBIN: He is in Atlanta.
17 THE COURT: And is
18 Mr. Placitella and Ms. O'Dell, are they both
19 in their office or are they with Mr. Hess?
20 MS. O'DELL: I am with the
21 witness, Judge, in Atlanta.
22 THE COURT: Okay.
23 MS. O'DELL: Mr. Placitella is
24 in New Jersey.
25 THE COURT: Okay. All right.

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1 Counsel, go ahead. Now I know.
2 MR. DUBIN: So I haven't even
3 asked him a single question basically
4 substantively yet before they decided that
5 they needed to approach the Court. All I had
6 done was put up one report and then I was
7 trying to orient him on what samples we were
8 talking about and then I was going to ask
9 him -- because he did the PLM work for that
10 report -- and I was going to ask him about the
11 conclusions and the work that he did.
12 And I made the entire report
13 available for counsel and I even offered if
14 they wanted to go off record and have the
15 witness read the entire report if he felt it
16 was necessary, but I didn't even get to ask a
17 single question.
18 Of course, they don't -- they
19 didn't even wait to see what the examination
20 was about other than, "Do you see here? This
21 was about 72 samples of talc," and then they
22 objected and we got the deposition shut down.
23 So I don't really know what
24 their complaint is. I am making materials
25 available to him. I am asking him about the

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1 work that he personally did, not about
2 anything else in the report, and so I don't
3 see what the objection is. It's a legitimate
4 scope of inquiry.
5 THE COURT: Can I ask a
6 question? In the case, is there a deposition
7 protocol that requires the production
8 beforehand of exhibits that are going to be
9 shown to a witness?
10 MS. O'DELL: There is a
11 deposition protocol and, your Honor, I do
12 believe that we mainly follow that, just to be
13 clear, more for an expert witness. There has
14 been a three-day disclosure rule; that's not
15 been followed in the instance of Mr. Hess
16 since his deposition is a little bit more
17 unique.
18 And so, Judge, let me just also
19 make clear, you know, as you know, in the
20 first round in the multi-district litigation,
21 the expert report that was at issue was the
22 February 1, 2019 expert report involving
23 historical samples that tested for amphibole
24 asbestos; that's the report that was at issue
25 in the Daubert hearing.

<p style="text-align: right;">Page 34</p> <p>1 Dr. Longo has had a two-day 2 deposition on that report. Dr. Rigler was 3 examined. Dr. Longo was examined before Judge 4 Wolfson at the Daubert hearing and the Court 5 issued a ruling allowing the analysis from 6 that report. 7 What Mr. Dubin -- 8 MR. DUBIN: If I can -- 9 MS. O'DELL: -- Mr. Dubin put 10 up is the February 1, 2019 material, and as 11 you are so well aware, what's been at issue in 12 the proceedings since they have been restarted 13 in the MDL are new things and there are 14 reports that have been disclosed by Dr. Longo 15 that relate to the analysis of talc for 16 chrysotile involving PLM. 17 And that is -- for those 18 reports that have been disclosed, to the 19 degree Mr. Hess was involved and worked on the 20 underlying analysis, we understand the Court 21 has allowed this deposition and that we'll go 22 forward, but for the defendants to try to go 23 back, replot 2019 round in a report that's not 24 involved is not fair. 25 For them to inquire of things</p>	<p style="text-align: right;">Page 36</p> <p>1 regarding this new method; that's the first 2 thing. 3 The second thing is, the 4 deposition was only limited to Mr. Hess' 5 personal involvement. Because the defendants 6 were making the argument -- not in these 7 words, but, in essence, that it was Mr. Hess 8 that was making these ultimate decisions and 9 not Dr. Longo. 10 So the questions have to be 11 limited to only what Mr. Hess did, his tests, 12 his personal observations. The deposition is 13 not to get Mr. Hess' opinion on what somebody 14 else did or what somebody else opines. 15 Mr. Hess is there to testify 16 about his firsthand personal knowledge about 17 these -- this new testing method; that -- that 18 is precisely why Mr. Hess' deposition was 19 permitted. It was not permitted to go over 20 ground that was covered previously in the 21 case, the TEM tests, if I am -- 22 MR. DUBIN: Right. 23 THE COURT: -- right or any of 24 the tests before this new method. 25 And if I remember right, I am</p>
<p style="text-align: right;">Page 35</p> <p>1 that he wasn't involved in, including the 2 actual text of the report, is not fair. His 3 work was the bench work and the 4 photomicrographs and to go beyond that, we 5 believe, is objectionable and we ask the Court 6 to not allow it. 7 THE COURT: Can I jump in here? 8 Because I am very familiar with the issues. 9 And the reason why leave was granted to the 10 defendants to take Mr. Hess' deposition was 11 based on the arguments that they made in their 12 briefs. 13 Ms. O'Dell is correct that the 14 subject matter of the deposition should only 15 be limited to what I call -- and I'm not quite 16 sure if the defendants used this word -- this 17 new method. And if I remember right, even in 18 my decision I set forth -- there was, like, a 19 date range, if I remember right. I don't have 20 it in front of me. It started in 2020 and 21 maybe went to 2024. 22 And I specifically remember 23 there was an exhibit that may have been 24 duplicated in different versions that set 25 forth precisely the tests that were at issue</p>	<p style="text-align: right;">Page 37</p> <p>1 obviously aware that Judge Wolfson had 2 stricken some of the tests in the original 3 Daubert opinion, and I think that the argument 4 is going to be that with this new method, it 5 was not subject to the old order and, 6 presumably, it will be the subject of a new 7 Daubert order. 8 But those parameters of why 9 Mr. Hess' deposition was permitted, those 10 should be the parameters of this deposition. 11 I hope that helps. 12 MR. DUBIN: We don't disagree 13 with that at all. The report I am asking him 14 about is the first time that he is using this 15 specific method to examine Johnson & Johnson, 16 as I will show when I go to the report. 17 In that report he begins to use 18 1.550 oil for the first time, which is the way 19 he is looking for chrysotile. In that report 20 is the first time that he starts to do that 21 and look at Johnson & Johnson. 22 And so that was what I was 23 going to ask him about, is about his personal 24 work using that method at that time, which 25 leads then into the first reports for</p>

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<p style="text-align: right;">Page 38</p> <p>1 chrysotile. 2 And so this is all about that 3 topic. I am not going into the TEM work. I 4 am not going into the PLM work that he did for 5 amphibole. 6 I am just asking him about this 7 kind of analysis that is the subject of the 8 entire deposition and this report, but I 9 didn't even get to get a single question in 10 before we ended up having to call your Honor, 11 I suppose. 12 THE COURT: Counsel, what you 13 were going to ask Mr. Hess about, is that one 14 of the tests that was on that list that 15 hopefully you know what I was referring? 16 MR. DUBIN: Your Honor, I will 17 go ahead and just explain to everybody, 18 although I really feel like I should be able 19 to ask the witness these questions, but what 20 we're going to see is that at this point, 21 before -- so at some point the FDA finds by 22 TEM chrysotile in one bottle of Johnson & 23 Johnson and after that time MAS starts to 24 report chrysotile by PLM basically every time 25 they look at it.</p>	<p style="text-align: right;">Page 40</p> <p>1 lay this as a foundation from the prior report 2 when some of that work was not his first is 3 improper and we object to that. I mean, the 4 2019 report is off the table. 5 MR. DUBIN: I am only asking -- 6 MR. PLACITELLA: I would just 7 add to that, to be fair to everyone, you know, 8 popping a report up that's X period of -- no 9 one has looked at for four or five years, you 10 know, in this context and start asking 11 questions, it's just not proper. 12 We have -- we can't -- we don't 13 know the context. He has taken little lines. 14 He has highlighted one line or two lines in a 15 report and then says, Well, we put the report 16 in chat. Go, have it. 17 Well, that's not fair. The 18 deposition today is supposed to be about the 19 report here at issue, nothing beyond that 20 report, and that's the -- I don't know what 21 else is coming; that's why we stopped it. 22 Are they going to pull out some 23 other report from some other case? I don't 24 know, but we've got to have some parameters of 25 what we're doing here.</p>
<p style="text-align: right;">Page 39</p> <p>1 What we're going to see is in 2 this report they're -- it's before the FDA 3 finding, they are using the exact same 4 methodology to look at the talc, and they do 5 not report chrysotile. 6 THE COURT: Counsel, what I'm 7 just concerned about is, you can ask him about 8 the tests using the new method. You can't -- 9 the purpose of the deposition is not to say, 10 Why did this person not find chrysotile and 11 you found chrysotile? 12 Ask him about his tests and 13 what he did and how he did it. 14 MR. DUBIN: He did the work on 15 both. I am asking about his work. 16 MS. O'DELL: Your Honor, we 17 would object. This is the 2019 report. It 18 was for amphiboles. Much of that work was not 19 done at MAS, it was done by another lab, and 20 so we object as that was fully covered by the 21 last proceedings. 22 For the new material, as the 23 Court has said, for his work, if they want to 24 ask him about it and ask him what oil he used, 25 that's fair game, but to go back and somehow</p>	<p style="text-align: right;">Page 41</p> <p>1 THE COURT: Counsel, I am 2 persuaded by plaintiffs' argument. Really, 3 this shouldn't be that difficult an issue. 4 The boundaries of this deposition were set 5 forth in the requests and my Order. 6 It's just about the tests that 7 he did, how he did it, his observations. He 8 is not there to answer questions about why did 9 they get the result in a 2019 test and a 10 different result in a later test; that's not 11 why he is there. 12 He is there to talk from his 13 personal observation about the new test; 14 that's it. 15 MR. DUBIN: But I just -- all I 16 am asking him about is his own work, doing it 17 the exact same way, why he came to a 18 conclusion -- different conclusion one time 19 versus the other, his own personal PLM work. 20 I am not asking him about 21 anybody else's work, asking him to offer 22 opinions about anybody else's work. I am just 23 asking him about what he did. 24 THE COURT: Counsel, if it's 25 not one of the tests on this exhibit list that</p>

<p style="text-align: right;">Page 42</p> <p>1 I referred to -- I know I referred to it 2 during oral argument. I don't recollect if I 3 referred to it in my decision. 4 If it's not one of those tests, 5 it's off limits. That's not the purpose of 6 the deposition. 7 MR. DUBIN: I am only asking 8 him about his PLM work in 1.550 and 1.560, 9 which is his chrysotile -- method for looking 10 for chrysotile, which is the subject of the 11 deposition. I'm not asking anything about any 12 PLM work. 13 THE COURT: Counsel, I don't 14 have that exhibit, that list in front of me, 15 but I have a feeling you know what I am 16 referring to, it would -- I believe it was an 17 exhibit to the two reports that the defendants 18 submitted. 19 And, you know, one of the 20 arguments for why the exception was denied was 21 because those experts prepared detailed 22 reports rebutting the plaintiffs' experts and 23 in those reports they attached as exhibits the 24 list of the samples that are at issue 25 regarding this new method. That's it. That's</p>	<p style="text-align: right;">Page 44</p> <p>1 Mr. Hess is only going to testify about his 2 personal observations. To me that's pretty -- 3 the boundaries are pretty clear. So I don't 4 know what else I can say. 5 MR. DUBIN: I understand, your 6 Honor. Again, I believe I am trying to stay 7 within that by asking him about his personal 8 observations of this material in 1.550 and 9 1.560 oil, but I understand. I will skip this 10 report. 11 I would like to be able to ask 12 him about differences in his images. Because 13 one of the big topics here is images. If they 14 decide to try to shut it down later when I do 15 it, I guess we'll take it up then, but we'll 16 see. I need to understand how -- what his 17 microscope setups are and whether he is 18 changing them and the like. 19 THE COURT: As long as it's 20 limited to the specific tests at issue that 21 are on that exhibit list. The exhibits are 22 attached to your expert reports, Counsel. So 23 you should have those at your fingertips. 24 Those were the tests that were 25 in the motion that the argument was that new</p>
<p style="text-align: right;">Page 43</p> <p>1 it. Those are the tests at issue. 2 MR. DUBIN: I understand that, 3 your Honor, and that's why as part of asking 4 about those conclusions, I need to understand 5 what changed between the two times he looked 6 at this with 1.550 oil to understand his 7 conclusions. 8 THE COURT: Well, if you're 9 asking about that, my ruling would be that's 10 off limits; that's not the purpose of this 11 deposition, not to compare old tests to new 12 tests. 13 The purpose of this deposition 14 is to ask him about his personal observations 15 regarding the new test; that's what was in the 16 defendant's papers. They didn't say anything 17 about asking him to compare old to new. 18 That's my ruling. If the 19 defendants think the questioning is going out 20 of those boundaries, instruct the witness not 21 to answer. We'll look at the transcript and 22 we'll make a ruling on a more fulsome record, 23 but I don't know what else I can say, Counsel. 24 It really should be a pretty 25 easy deposition. You have the tests at issue.</p>	<p style="text-align: right;">Page 45</p> <p>1 method was used and they found chrysotile 2 where they didn't previously find it; that's 3 the boundary of this deposition. Okay. 4 So I am in a mediation today, 5 but if you need me, send me an e-mail or a 6 text, and when I am available, I will get back 7 on the Zoom. Thank you, Counsel. 8 MS. O'DELL: Thank you, your 9 Honor. 10 MR. LUDWIG: Thank you, Judge. 11 MR. DUBIN: So we'll keep that 12 as an exhibit, as a proffer for the record. 13 (Break held off the record.) 14 VIDEOGRAPHER: The time is 15 10:17 a.m. We are back on the record. 16 BY MR. DUBIN: 17 Q. In terms of your background, when 18 did you start performing PLM dispersion 19 staining analysis? 20 A. 1989. 21 Q. That was when you took the course at 22 McCrone? 23 A. That is correct. 24 Q. Can you tell me a little bit about 25 that course? How long did it last? What were</p>

<p style="text-align: right;">Page 46</p> <p>1 you trained in?</p> <p>2 A. It lasted a week.</p> <p>3 Q. Okay.</p> <p>4 A. And we were trained to utilize the</p> <p>5 dispersion staining method to identify the</p> <p>6 various asbestos forms or minerals.</p> <p>7 MR. DUBIN: And if we can call</p> <p>8 up Hess slide 2. I will make a copy of it</p> <p>9 exhibit 4.</p> <p>10 (Exhibit 4 marked for</p> <p>11 identification.)</p> <p>12 BY MR. DUBIN:</p> <p>13 Q. And do you know what this is that</p> <p>14 we're looking at here in the image?</p> <p>15 A. Well, it's stated on the matrix,</p> <p>16 reference chrysotile.</p> <p>17 Q. And when you taught -- took the</p> <p>18 course at McCrone, were you taught that</p> <p>19 chrysotile should look magenta in parallel?</p> <p>20 A. We were.</p> <p>21 Q. And are you aware that McCrone has</p> <p>22 studied different types of chrysotile,</p> <p>23 including Calidria?</p> <p>24 MR. LUDWIG: Objection to form.</p> <p>25 THE WITNESS: I am not aware of</p>	<p style="text-align: right;">Page 48</p> <p>1 MR. KEESTER: Sorry, Morty.</p> <p>2 It's hard to print a single slide while</p> <p>3 we're -- I'm showing it.</p> <p>4 MR. DUBIN: Okay. Again, we'll</p> <p>5 put them in chat so that you have them later,</p> <p>6 but I don't want to take them off screen while</p> <p>7 we're doing this. It's a single slide. You</p> <p>8 can see it on the screen.</p> <p>9 BY MR. DUBIN:</p> <p>10 Q. All right. So --</p> <p>11 MS. O'DELL: We can't see it.</p> <p>12 Mr. Hess would, please, request a copy.</p> <p>13 BY MR. DUBIN:</p> <p>14 Q. The next step after you have made a</p> <p>15 judgment about what color you're looking at is</p> <p>16 to figure out what wavelength of light that</p> <p>17 is, right?</p> <p>18 A. That is correct.</p> <p>19 Q. And then you use some tables to</p> <p>20 convert that into a refractive index?</p> <p>21 A. That is correct. We used Dr. Su's</p> <p>22 tables.</p> <p>23 Q. And then, ultimately, those numbers</p> <p>24 can be used to derive a birefringence number,</p> <p>25 correct?</p>
<p style="text-align: right;">Page 47</p> <p>1 what Dr. McCrone or what McCrone had studied.</p> <p>2 MS. O'DELL: (Inaudible.)</p> <p>3 MR. DUBIN: That would be</p> <p>4 exhibit 4.</p> <p>5 MS. O'DELL: Would you, please,</p> <p>6 download it in the chat?</p> <p>7 MR. DUBIN: Sure. Just, Jake,</p> <p>8 whenever we do exhibits, let's just put them</p> <p>9 in chat.</p> <p>10 BY MR. DUBIN:</p> <p>11 Q. And so we'll walk through just so we</p> <p>12 can understand the basic process of dispersion</p> <p>13 staining.</p> <p>14 The first step after you have</p> <p>15 put the slide -- prepared the slide and put it</p> <p>16 on the microscope, the first step is for the</p> <p>17 analyst to make a judgment about what color</p> <p>18 they are seeing, right?</p> <p>19 A. Yes, sir.</p> <p>20 Q. Okay. And then after you make a</p> <p>21 judgment about what color you're seeing --</p> <p>22 MR. DUBIN: Jake, there is some</p> <p>23 weird stuff on the screen. Can you take that</p> <p>24 off screen, please, or just put the slide</p> <p>25 back?</p>	<p style="text-align: right;">Page 49</p> <p>1 A. Yes, sir.</p> <p>2 Q. Okay. And can you define for me</p> <p>3 what an alpha refractive index is?</p> <p>4 A. That would be your length slow --</p> <p>5 length fast direction.</p> <p>6 Q. Okay. How about a gamma refractive</p> <p>7 index? Do you know what a gamma refractive</p> <p>8 index is?</p> <p>9 A. That would be your length slow</p> <p>10 direction. It's -- normally for chrysotile,</p> <p>11 that would be parallel.</p> <p>12 Q. Okay. Can your alpha refractive</p> <p>13 index ever be higher than your gamma</p> <p>14 refractive index?</p> <p>15 A. Only if a mineral is negative in</p> <p>16 elongation.</p> <p>17 THE COURT REPORTER: Can you,</p> <p>18 please, repeat the answer.</p> <p>19 THE WITNESS: Only if the</p> <p>20 mineral is negative in elongation.</p> <p>21 BY MR. DUBIN:</p> <p>22 Q. All right. What does the refractive</p> <p>23 index of a mineral measure?</p> <p>24 A. It measures, basically, the</p> <p>25 difference in the light path as it passes</p>

<p style="text-align: right;">Page 50</p> <p>1 through the oil and particle edge. They 2 interface. 3 Q. What properties of a mineral 4 determine its refractive index? 5 A. Generally, the chemical, density. 6 Q. Anything else? 7 MR. LUDWIG: Objection to form. 8 THE WITNESS: I don't recall 9 off the top of my head. 10 BY MR. DUBIN: 11 Q. What is birefringence? 12 A. Birefringence is the difference 13 between the mineral's highest refractive 14 indices and its lowest refractive indices. 15 Q. Okay. What do you mean by -- what 16 do you mean by highest refractive indices, 17 first? 18 A. The highest refractive index for the 19 mineral. 20 Q. And so if a mineral is displaying 21 more than one color, how do you determine what 22 the highest refractive index is? 23 MR. LUDWIG: Objection to form. 24 THE WITNESS: One would 25 normally look for the wavelength that would be</p>	<p style="text-align: right;">Page 52</p> <p>1 Q. But is it the difference between the 2 highest and the lowest refractive indices? Is 3 that what maximum difference means? 4 A. Can you rephrase that just a little 5 bit? 6 Q. Sure. I mean, if you get -- if 7 you're saying that alpha and gamma are defined 8 by highest and lowest refractive indices, the 9 maximum difference means the difference 10 between that highest and that lowest 11 refractive index, right? 12 A. That would be the way I would see 13 it, yes. 14 Q. Okay. And do you know -- if we go 15 back to that slide that was marked as 16 exhibit 4. 17 MR. DUBIN: It could also be 18 slide 10. Whatever makes it easier for you, 19 Jake, to call it up. 20 BY MR. DUBIN: 21 Q. Do you know what causes chrysotile 22 to appear magenta in parallel? 23 A. It's the angle of the fraction as 24 the light passes up at the oil-particle 25 interface.</p>
<p style="text-align: right;">Page 51</p> <p>1 the highest of the mineral in the gamma 2 direction and -- 3 BY MR. DUBIN: 4 Q. And -- sorry. Go ahead. 5 A. And then apply that to the charts. 6 Q. Okay. How do you -- and then how do 7 you determine what the lowest refractive index 8 is if a mineral is displaying more than one 9 color? 10 A. You put it into the alpha direction. 11 For chrysotile, that would be perpendicular. 12 Q. Is it correct that the birefringence 13 is the quantitative expression of the maximum 14 difference in refractive index due to double 15 refraction? 16 MR. LUDWIG: Objection to form. 17 THE WITNESS: That is my 18 understanding. 19 BY MR. DUBIN: 20 Q. And what do you understand maximum 21 difference in that context to mean? 22 A. For any particular particle, it 23 would be what my examination leads me to 24 determine to be the refractive indices in most 25 gamma and alpha direction.</p>	<p style="text-align: right;">Page 53</p> <p>1 Q. And what creates the color magenta? 2 What creates -- what causes you to see the 3 color magenta specifically? 4 MS. O'DELL: I object to the 5 question to the degree it calls for an expert 6 opinion and it relates not to the testing 7 analysis that Mr. Hess has done on a specific 8 sample, which is the purpose of this 9 deposition. Asking expert opinion is not the 10 purpose of this deposition. 11 MR. LUDWIG: The Court has 12 already ordered on that. So this doesn't have 13 anything to do with the specific exam or the 14 scope on which the Court just advised the 15 parties to stay within. I am objecting to the 16 form of the question. 17 MR. DUBIN: I will lay a 18 further foundation for it. 19 BY MR. DUBIN: 20 Q. We are going to be talking about 21 your work identifying chrysotile in Johnson & 22 Johnson, but, typically, when MAS was 23 identifying chrysotile in Johnson & Johnson, 24 it was -- what was being called chrysotile was 25 yellow in parallel, right?</p>

<p style="text-align: right;">Page 54</p> <p>1 MR. LUDWIG: Same objection. 2 That is exactly what the Court 3 ruled upon. So objection. 4 MR. DUBIN: No. Those are the 5 reports at issue, which the Court said we 6 could ask about. 7 MS. O'DELL: And if you would 8 like to ask Mr. Hess about specific reports, 9 he is here and prepared to respond to your 10 questions, but asking for expert opinion is 11 beyond the scope of what Judge Schneider 12 established for this deposition and we'll 13 instruct the witness not to answer. 14 MR. LUDWIG: I instruct the 15 witness not to answer that question. 16 BY MR. DUBIN: 17 Q. In your reports identifying 18 chrysotile in Johnson & Johnson, what color 19 are the particles that you're calling 20 chrysotile typically in parallel? 21 MR. LUDWIG: Objection to form. 22 THE WITNESS: The colors that I 23 utilize to determine the wavelength are at the 24 edge of the particle and not in the center. 25 BY MR. DUBIN:</p>	<p style="text-align: right;">Page 56</p> <p>1 MR. DUBIN: All right. Let's 2 take this down. We'll come back to it when we 3 show your reports. 4 BY MR. DUBIN: 5 Q. What color -- what is the refractive 6 index of talc? 7 A. It has wide -- a large 8 birefringence, but normally it will be 9 somewhere in the range of around 1.540 to 10 1.605, based on the experience of what I have 11 seen. 12 Q. How about a talc plate, a flat talc 13 plate? What is -- what is the refractive 14 index of a talc plate? 15 MS. O'DELL: Object to the 16 form. 17 THE WITNESS: I don't believe 18 the talc plate has any birefringence, but the 19 edges that I have seen have been blue in 1.55, 20 and have been yellowish in 1.605. 21 BY MR. DUBIN: 22 Q. Did the CSDS colors associated with 23 talc itself in 1.550 oil include the color 24 red? 25 MS. O'DELL: Would you repeat</p>
<p style="text-align: right;">Page 55</p> <p>1 Q. Okay. What color are the particles? 2 MS. O'DELL: Objection to the 3 form. 4 What particle? What -- 5 BY MR. DUBIN: 6 Q. The particle that you're calling 7 chrysotile in the reports that you're talking 8 about today? 9 MR. LUDWIG: Is there a 10 specific report you want to show him? This 11 right here, it looks like an exhibit created 12 by defense counsel. So that's not -- he is 13 not here to opine about this exhibit that 14 looks like a PowerPoint by someone else. 15 This is not a -- 16 MR. DUBIN: This is enough 17 speaking objections. You can make your 18 objections if you want to make your 19 objections. If you want to instruct your 20 witness not to answer the question, then you 21 can do that, but no more speaking objections. 22 It's gone way too far. 23 MR. LUDWIG: Based on the scope 24 that the Judge had lined out, I am instructing 25 him not to answer that question.</p>	<p style="text-align: right;">Page 57</p> <p>1 the question? I missed the first part. 2 BY MR. DUBIN: 3 Q. Do the central stop dispersion 4 staining colors of talc plates themselves in 5 1.550 oil include the color red? 6 MS. O'DELL: Object to the 7 form. 8 MR. LUDWIG: Same objection as 9 before. 10 I instruct you not to answer. 11 That's -- that calls for an 12 expert opinion. 13 MR. DUBIN: I am asking his 14 understanding and it relates to this work that 15 he is doing. 16 BY MR. DUBIN: 17 Q. Did it -- does it include red? 18 MS. O'DELL: If you have a 19 specific particle you would like to ask him 20 about, that's within the scope of the order, 21 but to ask it in isolation is beyond the scope 22 and seeks an expert opinion. 23 MR. DUBIN: Fine -- 24 MR. LUDWIG: Join. 25 MR. DUBIN: -- when you get to</p>

15 (Pages 54 - 57)

<p style="text-align: right;">Page 58</p> <p>1 the specific color, the specific reports. 2 BY MR. DUBIN: 3 Q. So let's look at one of your reports 4 just so we can understand, again, what color 5 talc should be. So we're now going to be 6 looking at an image from your -- from the 7 September 16, 2020 report on Chinese talc 8 research samples where you were the PLM 9 analyst. 10 MR. DUBIN: So can we make that 11 image exhibit 5. 12 (Exhibit 5 marked for 13 identification.) 14 MS. O'DELL: So, first, object 15 to a reference that those reports are his 16 report. Those reports are reports from 17 Dr. Longo, first. 18 Second, if you're going to ask 19 him a question about a report, it needs to be 20 put in the chat and the specific page that 21 you're referring to needs to be identified so 22 he can see it in context. 23 MR. DUBIN: And I am going to 24 identify the specific page that we're talking 25 about. So let's put it in chat and then we</p>	<p style="text-align: right;">Page 60</p> <p>1 don't know if it's his report or not. I trust 2 Ms. O'Dell. 3 So you're instructed not to 4 answer. 5 MR. DUBIN: Okay. We'll 6 double-check what you're -- the list that went 7 in, but I believe that the results in this are 8 included in the reports, but we'll -- I'll 9 hold off on this image until after a break so 10 that we don't have to spend time arguing it. 11 BY MR. DUBIN: 12 Q. Let's look at another image first, 13 but before I get to more images, I want to 14 stop and ask you a little bit about your 15 microscopes, okay, and what microscopes you 16 were using and how you set them up. 17 At some point initially were 18 you using an Olympus microscope for -- to look 19 at Johnson & Johnson for chrysotile? 20 A. Olympus BH2. 21 Q. And that -- so can you repeat the 22 model number for me? BX? 23 A. BH, bravo -- 24 Q. Okay. BH2. Okay. And those 25 microscopes had tungsten lightbulbs?</p>
<p style="text-align: right;">Page 59</p> <p>1 can call it up, okay, and then we're going to 2 go to page 3 of this. 3 MS. O'DELL: And if you would 4 identify -- please, just if you'll go back to 5 page 1. Because I am not seeing it in the 6 chat yet. 7 MR. LUDWIG: It's in the chat 8 here now. 9 MR. DUBIN: It is in the chat. 10 MS. O'DELL: Okay. 11 MR. DUBIN: 296, actually, is 12 the image and we can rotate that so we can see 13 it better. 14 MS. O'DELL: And what's -- I'm 15 sorry, Morty. I couldn't see it. I was too 16 slow trying to see. I see here. Just a 17 moment. Let me make sure that this is 18 actually a report at issue in the MDL. 19 This is not one of the reports 20 that's been disclosed in the MDL and so we 21 would object to questioning based on that. 22 MR. LUDWIG: If it's not a 23 report disclosed in the MDL and it's not 24 subject to the Judge's scope, then I am 25 instructing the witness not to answer. I</p>	<p style="text-align: right;">Page 61</p> <p>1 A. Yes, sir. 2 Q. And then at some point you switched 3 over to Leica microscopes; is that right? 4 A. That is correct. 5 Q. And what was the Leica model number? 6 A. As I recall, it's the 2700P. 7 Q. Do you recall approximately when you 8 changed over microscopes? 9 A. It was during the early part of 10 2021, I believe. 11 Q. And just so we understand basically 12 how it operated, how was illumination 13 controlled on the Olympus PLM? 14 A. By individual controls on the side 15 and to bring up as much light as possible. 16 Q. Okay. So was it a dial? Was it a 17 switch? How did you adjust illumination? 18 A. On the lamp itself, there was a 19 little dial on the side. 20 Q. Okay. And what -- did MAS have any 21 protocols for how illumination should be set 22 on the Olympus microscope when doing the 23 analysis? 24 A. I would always set it myself to the 25 highest illumination.</p>

<p style="text-align: right;">Page 62</p> <p>1 Q. Okay. As a PLM analyst, how do you 2 tell if an image is appropriately illuminated? 3 A. Well, if the scope had capability, 4 we use Kohler illumination, but the best way 5 to get the most illumination out of any type 6 of scope is to have all the different parts 7 align and centered. 8 Q. Okay. And is it important for a PLM 9 analyst to be able to see all the particles in 10 the field of view clearly? 11 A. Through the ocular, yes. 12 Q. When you were doing your analysis on 13 the Olympus microscope and you were looking 14 for the colors of the particle, were you 15 typically doing that by assessing it through 16 the eyepiece of the microscope or by looking 17 at the -- or looking at a screen? 18 A. Through the microscope. 19 Q. And did the -- what is white 20 balancing? 21 A. Basically, it takes the program that 22 you're using for the graphics and allows it to 23 adjust to the pure white light. 24 Q. And did the Olympus come with any 25 filters, like a daylight filter or blue</p>	<p style="text-align: right;">Page 64</p> <p>1 MR. LUDWIG: Is there a 2 specific report you're asking about? 3 MR. DUBIN: There are a set of 4 reports that are done on an Olympus 5 microscope. There are then a set of reports 6 that are done on the Leica microscope. 7 I am asking about the ones he 8 did on Olympus. If we want -- if we need to 9 call up an example, I am happy to do that. So 10 we'll call up an example of that. 11 We can go to the Zimmerman 12 report and that will be exhibit 6 and so let's 13 make that exhibit 6. For internal reference 14 it's CX-6. It's -- this is an image from the 15 February 24, 2020 analysis of Johnson & 16 Johnson. We can put it in chat and call it 17 up. 18 (Exhibit 6 marked for 19 identification.) 20 BY MR. DUBIN: 21 Q. Okay. And I want to look at an 22 image there. We can go to, I guess, 39 of the 23 report. I am just going to -- okay. For 24 example, this was in 2020. 25 So this would be on the Olympus</p>
<p style="text-align: right;">Page 63</p> <p>1 filter, to perform white balancing with? 2 A. It had a -- we had a blue diffusion, 3 but there was nothing in -- to do white 4 balance, you have to have a white background. 5 Q. So it came with a blue light or 6 daylight filter? 7 A. I would just remove the diffuser. 8 Q. I am sorry. I don't understand. 9 Would -- did the microscope 10 come with or did you have a blue light or 11 daylight filter on the Olympus? 12 A. I don't recall. 13 Q. Do you know whether you used a blue 14 light or a daylight filter when performing 15 analysis for chrysotile in Johnson & Johnson 16 with the Olympus microscope? 17 MR. LUDWIG: Objection to form. 18 Is there are a specific test 19 you're asking about? It's my understanding 20 there was lots of tests. 21 So I am going to object to the 22 form. Same scope issue. 23 MR. DUBIN: It's the reports at 24 issue. I'm asking about his microscope setup 25 for the reports at issue.</p>	<p style="text-align: right;">Page 65</p> <p>1 microscope, correct? 2 A. That is correct. 3 Q. Okay. So now we have an image. 4 We're talking about a specific report. 5 When you were doing these 6 analyses for Johnson & Johnson, were you using 7 a blue light or daylight filter? 8 A. I don't recall if we ever had any 9 specific daylight or blue filters for the 10 Olympus. The only thing blue was the 11 diffuser. 12 MS. O'DELL: What is your other 13 report? 14 MR. DUBIN: So this is -- this 15 was page 36, I think. 16 BY MR. DUBIN: 17 Q. All right. We'll come back to that 18 in a bit. 19 Do you know what the purpose is 20 of a blue light or a daylight filter? 21 MS. O'DELL: Object to the 22 form. 23 MR. LUDWIG: Object to the 24 form, yeah. It calls for expert testimony. 25 I instruct you not to answer</p>

17 (Pages 62 - 65)

<p style="text-align: right;">Page 66</p> <p>1 that question.</p> <p>2 MR. DUBIN: You're instructing</p> <p>3 him not to answer? I am asking him about the</p> <p>4 work he did, how he set up his microscope, and</p> <p>5 what filters he was using and you're</p> <p>6 instructing him not to answer that?</p> <p>7 MS. O'DELL: That was not your</p> <p>8 question.</p> <p>9 MR. DUBIN: Well, I just asked</p> <p>10 him about whether it had a blue light filter</p> <p>11 and whether he was using it and I am asking</p> <p>12 him now what his understanding of the purpose</p> <p>13 of that type of filter is. Are you</p> <p>14 instructing him not to answer that question?</p> <p>15 MS. O'DELL: He is here to --</p> <p>16 he is here to testify to what he did, which</p> <p>17 he -- the equipment he used, which he has been</p> <p>18 responding to those questions.</p> <p>19 Understanding about certain</p> <p>20 methodologies, giving his opinion about</p> <p>21 certain methodologies is beyond the scope of</p> <p>22 what Judge Schneider has ordered.</p> <p>23 MR. DUBIN: Are you instructing</p> <p>24 him not to answer --</p> <p>25 MR. LUDWIG: The objection --</p>	<p style="text-align: right;">Page 68</p> <p>1 get there. Okay. Thank you.</p> <p>2 BY MR. DUBIN:</p> <p>3 Q. Do you know how looking at an image</p> <p>4 to tell whether a blue light filter or</p> <p>5 daylight filter is being used?</p> <p>6 A. I don't recall ever dealing with</p> <p>7 them.</p> <p>8 Q. Okay. How was focus adjusted on the</p> <p>9 Olympus microscope?</p> <p>10 A. Focus would be adjusted using the</p> <p>11 fine focus knob.</p> <p>12 Q. Okay. I want to show you another</p> <p>13 image and ask you if you can tell me whether a</p> <p>14 blue light filter is being used or not.</p> <p>15 MR. DUBIN: It will be</p> <p>16 exhibit -- what number are we on? We are now</p> <p>17 on six?</p> <p>18 THE COURT REPORTER: Seven.</p> <p>19 MR. DUBIN: And that is --</p> <p>20 THE COURT REPORTER: You're on</p> <p>21 exhibit 7, I believe.</p> <p>22 MR. DUBIN: Exhibit 7. Okay.</p> <p>23 That is CX-11A to call it up and if you could</p> <p>24 just go to page 22 of it and put it in chat.</p> <p>25 MS. O'DELL: Mr. Hess, just</p>
<p style="text-align: right;">Page 67</p> <p>1 MR. DUBIN: -- a simple</p> <p>2 question about the purpose of a blue light</p> <p>3 filter? Are you instructing him not to</p> <p>4 answer?</p> <p>5 MR. LUDWIG: Yes.</p> <p>6 MR. DUBIN: Okay.</p> <p>7 MR. LUDWIG: I believe that is</p> <p>8 outside the scope of what the Judge just</p> <p>9 said --</p> <p>10 MR. DUBIN: I really don't --</p> <p>11 if you instruct him not to answer, I don't</p> <p>12 need to hear a long speaking objection in</p> <p>13 addition.</p> <p>14 MR. LUDWIG: Sure. Fair</p> <p>15 enough.</p> <p>16 MS. O'DELL: And just for the</p> <p>17 record, Morty -- and I think it's just a page</p> <p>18 number issue -- you identified what's on the</p> <p>19 screen as page 36 of the report. I am</p> <p>20 assuming you mean 36 -- page 36 in the PDF?</p> <p>21 MR. KEESTER: It's 39 in the</p> <p>22 PDF.</p> <p>23 MR. DUBIN: Thirty-nine.</p> <p>24 Sorry.</p> <p>25 MS. O'DELL: Okay. Let me just</p>	<p style="text-align: right;">Page 69</p> <p>1 give us a moment to see what's going to be put</p> <p>2 on the screen and what the report is.</p> <p>3 (Exhibit 7 marked for</p> <p>4 identification.)</p> <p>5 BY MR. DUBIN:</p> <p>6 Q. Page 22, can you tell me if a blue</p> <p>7 light or daylight filter is being used on this</p> <p>8 image?</p> <p>9 MR. LUDWIG: Objection --</p> <p>10 objection. This, once again, calls for expert</p> <p>11 opinion, which is outside the scope of the</p> <p>12 purpose of this deposition as instructed by</p> <p>13 the Judge.</p> <p>14 MR. DUBIN: Are you instructing</p> <p>15 him not to answer the question?</p> <p>16 MR. LUDWIG: I am instructing</p> <p>17 him not to answer the question.</p> <p>18 MS. O'DELL: Yes. This is not</p> <p>19 a document that's been disclosed in the MDL.</p> <p>20 It's a report for Dr. Longo. It's analysis of</p> <p>21 ceramic slip clay for something else that's</p> <p>22 not related and we object to the use of this</p> <p>23 exhibit.</p> <p>24 MR. DUBIN: Okay. Can we call</p> <p>25 up -- we'll make the next exhibit in order</p>

<p style="text-align: right;">Page 70</p> <p>1 Hess slide 20. 2 THE COURT REPORTER: This is 3 exhibit 8. 4 MR. DUBIN: That's exhibit 8. 5 Can we call that up, Jake? 6 (Exhibit 8 marked for 7 identification.) 8 BY MR. DUBIN: 9 Q. I am putting up the image that I 10 showed you before, as well as the image from 11 Zimmerman that I showed you before. These are 12 both analyses that you performed. 13 Can you tell me why the color 14 of the talc is different in the two images? 15 MS. O'DELL: We object to the 16 use of this document. First, Vanderbilt is 17 not at issue in this case, it's not a report 18 that's at issue in this case. We object to 19 the use of that image. 20 To the degree you want to have 21 him -- ask him about the Zimmerman report. 22 You had it up. He is welcome to answer 23 questions, but we object to the use of this 24 defense created exhibit. 25 MR. LUDWIG: And I am going to</p>	<p style="text-align: right;">Page 72</p> <p>1 And if I asked you about the 2 differences in illumination in these two 3 images, are you going to instruct your witness 4 not to answer that also? 5 MR. LUDWIG: Yes. 6 MS. O'DELL: And, again -- and, 7 Jake, I know you have a lot going on, but if 8 you would put that in the chat, please. 9 BY MR. DUBIN: 10 Q. How are your images being taken on 11 the Olympus? How are the images being taken? 12 A. It was done using an AmScope camera 13 and an AmScope program. 14 Q. Okay. Were there any specific 15 settings that you had on the camera for 16 purposes of taking the images? 17 A. I don't recall everything. 18 Q. Are you familiar -- you're familiar 19 with ISO 22262-1? 20 A. Familiar. 21 Q. Do you know whether it says anything 22 about using blue or daylight filters? 23 MS. O'DELL: Object to the 24 form; calls for expert opinion; beyond the 25 scope of the work that Mr. Hess did in the</p>
<p style="text-align: right;">Page 71</p> <p>1 join and I am going to instruct him not to 2 answer. 3 Once again, you're getting into 4 expert opinion, which is outside the scope of 5 what the Judge instructed this witness. 6 MR. DUBIN: Was your -- okay. 7 So you're instructing him not to answer. I am 8 going to ask another question. If you 9 instruct him not to answer, then so be it. 10 BY MR. DUBIN: 11 Q. But was the microscope set up 12 differently in these two analyses? Can you 13 tell by looking at the images whether the 14 microscope was set up differently in the two 15 analyses? 16 MR. LUDWIG: Same objection. 17 MS. O'DELL: Please put the 18 exhibit in the chat. 19 MR. DUBIN: Are you instructing 20 him not to answer? 21 MR. LUDWIG: Yes. 22 MR. DUBIN: And if -- can you 23 leave it back up, Jake? What's going on? I 24 am not done yet. Can you put that back up, 25 Jake? Thank you.</p>	<p style="text-align: right;">Page 73</p> <p>1 MDL; and that's my objection. 2 Counsel can decide whether to 3 instruct him not to answer. 4 MR. LUDWIG: I am instructing 5 you not to answer that. 6 BY MR. DUBIN: 7 Q. Okay. Let's talk about your Leica 8 microscope setup. 9 First, how was illumination 10 adjusted on the Leica microscope? 11 A. It had a lamp knob on the side, 12 which we could bring up full illumination. 13 Q. Was it a dial or was it -- was it a 14 switch? How did the illumination work? 15 A. It was a dial. 16 Q. And what -- if you turn that dial, 17 if you kept turning it, would it stop at some 18 point or could you continue to turn it and 19 turn it? 20 A. I could continue to turn it. 21 Q. Okay. So how did you set the 22 brightness on the Leica? 23 A. By observation through the 24 microscope itself to the brightest point 25 available.</p>

<p style="text-align: right;">Page 74</p> <p>1 Q. So you -- did you always keep it at 2 the brightest point available? 3 A. Yes, sir. 4 Q. Okay. And did the Leica microscope 5 come with any filters? 6 A. The only filter I'm aware of is the 7 530 nanometer plate. 8 Q. Did it have a daylight filter 9 switch? 10 A. Not that I am aware of. 11 MR. DUBIN: Let's make exhibit 12 9 Hess slide 22 and we can call that up. 13 (Exhibit 9 marked for 14 identification.) 15 BY MR. DUBIN: 16 Q. Is this -- does this look familiar 17 to you as the Leica microscope that you were 18 using? 19 A. It looks familiar. 20 Q. Do you recall the switches that we 21 see here: Daylight filter switch, neutral 22 density filter switch? 23 A. Yes. 24 Q. Okay. Do you know whether your -- 25 when you started using the Leica microscope,</p>	<p style="text-align: right;">Page 76</p> <p>1 MR. DUBIN: Exhibit 10. 2 (Exhibit 10 marked for 3 identification.) 4 BY MR. DUBIN: 5 Q. Do you know why your images taken on 6 the Olympus microscope of talc are more orange 7 than reference talc images? 8 MS. O'DELL: I object to the 9 use of this exhibit. It's unclear if it came 10 from a report that's at issue in this 11 deposition, it's unclear if it's -- if it's 12 Mr. Hess' work, and we object to its use. 13 MR. LUDWIG: And I will join. 14 It outside the scope of the parameter of the 15 deposition. I am instructing Mr. Hess not to 16 answer that question. 17 MR. DUBIN: Okay. 18 BY MR. DUBIN: 19 Q. Let's, again, go to your Zimmerman 20 report. We have already marked that as an 21 exhibit. We can call it back up, CX-6. So we 22 have looked at this already. Let's go back to 23 that image, starting at page 39. 24 So this is something that 25 you're calling chrysotile in parallel in</p>
<p style="text-align: right;">Page 75</p> <p>1 whether your daylight filter switch was in an 2 "on" or "off" position? 3 A. I don't recall today. 4 Q. All right. Are you familiar with 5 what reference talc looks like from the USP 6 documents? 7 MR. LUDWIG: Objection; calls 8 for expert opinion. I am instructing him not 9 to answer. 10 MS. O'DELL: Join. 11 MR. DUBIN: Okay. Well, 12 just -- we'll see. You may instruct him not 13 to answer again, but I am going to ask it. 14 If we can put Hess slide 24 as 15 the next exhibit. 16 MS. O'DELL: We have not gotten 17 the last exhibit in the chat yet. So, please, 18 if we can just pause and take the time and put 19 that in the chat? Thank you. 20 MR. KEESTER: I'm sorry, Morty. 21 What slide are we doing? 22 MR. DUBIN: Twenty-four. 23 MR. LUDWIG: Is slide 24 24 exhibit 9 or is slide 24 exhibit 10? I'm 25 sorry.</p>	<p style="text-align: right;">Page 77</p> <p>1 1.550. 2 What color is that? 3 MS. O'DELL: If you need to see 4 it and see it more closely, Mr. Hess, please 5 let us know that. 6 And if there is -- if there is 7 a specific structure you're referring to that 8 you can direct Mr. Hess? 9 MR. DUBIN: Right. 10 BY MR. DUBIN: 11 Q. The one with the micron bar under it 12 is the one that they are calling chrysotile. 13 What color is it? 14 MR. LUDWIG: Can I have that 15 question reread, please? 16 THE COURT REPORTER: One 17 moment. 18 "QUESTION: So this is 19 something that you're calling chrysotile 20 in parallel in 1.550. 21 "What color is that?" 22 MR. LUDWIG: I am going to 23 object once again. It's calling for an expert 24 opinion. 25 MR. DUBIN: This is -- I am</p>

20 (Pages 74 - 77)

<p style="text-align: right;">Page 78</p> <p>1 asking him about his reports that are at issue 2 in this case and asking him what color that he 3 is calling particles and that is exactly in 4 the scope of the deposition. 5 So unless you're instructing 6 him not to answer that as well, my question 7 stands. 8 MR. LUDWIG: I instruct him not 9 to answer that question. 10 MR. DUBIN: Okay. So now 11 you're instructing the witness not to answer 12 questions even about the specific reports that 13 he was -- that we were permitted to depose him 14 on. 15 Is that my understanding? 16 MS. O'DELL: So would you 17 repeat your question, please? 18 MR. DUBIN: Oh, my goodness. 19 What color is the particle that you're calling 20 chrysotile here? 21 MR. LUDWIG: I am standing by 22 my objection. I am instructing him not to 23 answer. 24 It goes to -- you're asking him 25 to opine as to the color. The color is on the</p>	<p style="text-align: right;">Page 80</p> <p>1 Q. We can zoom more in. 2 A. The center part of it is a golden 3 yellow, but I cannot determine the edges, 4 which is where I need to look. 5 Q. Okay. Well, we'll go over this edge 6 effect, but you can agree that this is not -- 7 this does not look like reference chrysotile, 8 correct? 9 MS. O'DELL: Object to the 10 form. 11 MR. LUDWIG: Same objection. 12 THE WITNESS: The center of the 13 particle is not what you would usually call. 14 BY MR. DUBIN: 15 Q. And -- sorry. And you see that 16 there are rounded structures in this image, 17 right? 18 A. There are. 19 Q. Those are talc? 20 A. Some may be. 21 Q. Are they the same color as the 22 particle that you're calling chrysotile? 23 MS. O'DELL: Object to the 24 form. 25 THE WITNESS: It is, but I --</p>
<p style="text-align: right;">Page 79</p> <p>1 screen and it is part of an expert report 2 prepared by MAS and you're taking it out of 3 context. 4 So I am going to instruct you 5 not to answer. 6 If you want to ask him how he 7 developed the color, that's what the Judge 8 said, but -- 9 MR. DUBIN: (Inaudible.) 10 MR. LUDWIG: -- his personal 11 involvement. 12 BY MR. DUBIN: 13 Q. You are the analyst who did this 14 work for the Zimmerman report and we can go 15 through your PLM -- the PLM sheets. 16 You did this analysis, right? 17 MR. LUDWIG: Okay. That's 18 fine. Let's do that. 19 BY MR. DUBIN: 20 Q. You did this analysis? These are 21 your PLM images, correct, Mr. Hess? 22 A. It is. 23 Q. So I'm asking you what color did you 24 assess this particle as? 25 A. Could you zoom in on the particle?</p>	<p style="text-align: right;">Page 81</p> <p>1 the other particle colors, without being able 2 to see the true edges of the particle in 3 question -- 4 BY MR. DUBIN: 5 Q. Okay. We'll talk about edges -- 6 MS. O'DELL: Excuse me, Morty. 7 I don't believe you could hear. He is not 8 finished with his answer. 9 BY MR. DUBIN: 10 Q. Go ahead. 11 A. -- I cannot comment. 12 Q. We'll talk about edges later. 13 Have you seen any PLM work of 14 Johnson & Johnson done by any other experts? 15 A. I don't recall. 16 MR. DUBIN: Okay. Let's put up 17 Hess slide 25 as exhibit 11. 18 (Exhibit 11 marked for 19 identification.) 20 BY MR. DUBIN: 21 Q. We're looking at images of PLM -- 22 and I will mark the entire report also from 23 Mr. Poye and from you -- both from on talcs. 24 Do you have any understanding 25 why the images look so different?</p>

<p style="text-align: right;">Page 82</p> <p>1 MR. LUDWIG: Objection to form; 2 that goes into expert testimony and you made 3 your question -- this appears to be a defense 4 exhibit, I guess, comparing two different 5 samples. It is not a specific report from 6 MAS. 7 So I am instructing the witness 8 not to answer. This calls for expert opinion, 9 outside the scope of his testimony. 10 MS. O'DELL: Join. 11 MR. DUBIN: So the whole -- so 12 that we have the whole report in the record, 13 let's mark CX-53 as exhibit 11. 14 MS. O'DELL: Please put the 15 slide in the chat screen, Jake. Thank you. 16 THE COURT REPORTER: I just 17 want to confirm. Exhibit 11 was slide 25. 18 Are we now marking the whole report? 19 MR. DUBIN: Yeah, we're going 20 to now mark the whole report as exhibit 11. 21 MS. O'DELL: And we have -- 22 since the -- 23 MR. DUBIN: I am just marking 24 it for the record. I understand you have 25 objected to my asking him about it.</p>	<p style="text-align: right;">Page 84</p> <p>1 for your deposition today was some material 2 from Dr. Su. 3 What did you review? 4 A. I reviewed primarily the -- all the 5 images that he had put in the comments. For 6 lack of a better way to put it, the slide 7 show. 8 Q. Okay. Have you reviewed his 9 affidavit entitled: Review of Dr. Longo's PLM 10 Methods for the Identification of Chrysotile? 11 A. I don't recall that one. 12 Q. Okay. What, if any, comments do you 13 have on the slides that you reviewed from 14 Dr. Su? 15 A. Well -- 16 MS. O'DELL: Object to form. 17 MR. LUDWIG: Object to the 18 form. 19 MS. O'DELL: Calls for expert 20 opinion. It's beyond the scope of this 21 deposition. 22 MR. DUBIN: Are you instructing 23 him not to answer? 24 MR. LUDWIG: I am instructing 25 him not to answer.</p>
<p style="text-align: right;">Page 83</p> <p>1 MS. O'DELL: Understood, but is 2 the report going to be exhibit 12 and the 3 slide is going to be exhibit 11? 4 MR. DUBIN: I thought the 5 report was 11, but maybe I miscounted. 6 MR. LUDWIG: Exhibit 11 was the 7 slide and then exhibit 12 was going to be the 8 full report, if that's what you want to do. 9 I'm sorry. I am not trying to 10 step on your toes. I am trying to be helpful 11 in this. 12 MR. DUBIN: If the slide was 13 not marked -- I thought that was exhibit 10, 14 but if it's not marked, that's fine. I can 15 make it exhibit 12. 16 THE COURT REPORTER: This is 17 the court reporter. We have slide 25 as 18 exhibit 11. We have the report as exhibit 12. 19 MR. DUBIN: Okay. 20 MS. O'DELL: Thank you. 21 (Exhibit 12 marked for 22 identification.) 23 BY MR. DUBIN: 24 Q. All right. You indicated that one 25 of the things that you reviewed in preparation</p>	<p style="text-align: right;">Page 85</p> <p>1 BY MR. DUBIN: 2 Q. You also indicated you reviewed some 3 materials from Dr. Wylie? 4 MS. O'DELL: Same. 5 BY MR. DUBIN: 6 Q. What did you review? 7 A. The report that -- I don't recall 8 the name of the report, but I believe it was 9 her most recent report. 10 Q. Okay. Do you have any comments on 11 the -- on her review of your work? 12 MR. LUDWIG: Same objection. 13 I instruct him not to answer. 14 He is not here to provide criticisms of 15 Dr. Wylie. The Court made it very clear, the 16 scope of the testimony. 17 MS. O'DELL: Join. 18 MR. DUBIN: These are all 19 related to his work that is the subject of 20 this deposition, but if you're instructing him 21 not to answer, then that will be an 22 instruction. We'll take it up at some point. 23 Because we're clearly going to 24 have to go back to the drawing board about the 25 way that these objections are being made, but</p>

22 (Pages 82 - 85)

<p style="text-align: right;">Page 86</p> <p>1 if you're instructing him not to answer, but 2 my proffer is that they are all about the 3 reports at issue in this case. 4 MS. O'DELL: Mr. Hess is here 5 today to answer questions regarding his 6 reports and he has answered your questions 7 about those. He is not here to offer expert 8 opinion, criticism, thoughts, et cetera, about 9 defense or expert witnesses. 10 MR. DUBIN: Okay. 11 BY MR. DUBIN: 12 Q. In terms of illumination, I want to 13 look at another report just quickly, your 14 report and your analysis. It will be exhibit 15 13. It's CX-28 is the internal reference and 16 it's dated 4/13/2021. 17 MR. DUBIN: If we could put it 18 in chat and then call it up. 19 MS. O'DELL: Chris, you put a 20 comment in chat. Did you have an objection? 21 We're not hearing you if you're making an 22 objection. 23 MR. PLACITELLA: Well, my 24 objection is that it seems like it's 25 repeatedly -- documents are repeatedly being</p>	<p style="text-align: right;">Page 88</p> <p>1 Is it your testimony that this 2 image was taken at maximum illumination? 3 A. Yes, sir. 4 Q. So the brightness level on the 5 Olympus does not go any higher than this? 6 MR. LUDWIG: Objection; asked 7 and answered. 8 THE WITNESS: Pardon? 9 MR. LUDWIG: I said, objection; 10 asked and answered. 11 BY MR. DUBIN: 12 Q. Is that correct? Your testimony is 13 that the Olympus microscope you were using at 14 this time, it cannot take any brighter images 15 than this. 16 Is that your testimony? 17 MS. O'DELL: Object to the 18 form. 19 THE WITNESS: May I see the 20 lower part of the image? 21 BY MR. DUBIN: 22 Q. I'm sorry? You want to see the 23 lower part of the image? Sure. 24 A. Thank you. 25 That was not taken on the</p>
<p style="text-align: right;">Page 87</p> <p>1 put up in contravention of the Court's Order 2 and we're here to try to get through this 3 deposition and the purposes of trying to make 4 a record. 5 I mean, this is exactly what 6 the Judge said not to do -- 7 MR. DUBIN: Okay. 8 MR. PLACITELLA: -- and you 9 keep doing it. 10 MR. DUBIN: I completely 11 disagree with you and I am making my record. 12 He is being instructed not to answer, I need a 13 record of that, and thank you for your 14 comments, but we're moving on. 15 MR. PLACITELLA: Okay. No 16 problem. 17 MR. DUBIN: Thanks. 18 (Exhibit 13 marked for 19 identification.) 20 BY MR. DUBIN: 21 Q. So I just want to understand your 22 testimony. If we go to PDF 2 here, this is 23 one of your -- sorry. It will be the image. 24 So it's at 84. And, again, I want to talk to 25 you a little bit about illumination.</p>	<p style="text-align: right;">Page 89</p> <p>1 Olympus. 2 Q. Okay. So this is Leica? 3 A. This is a Leica. 4 Q. Okay. So is it your testimony that 5 the Leica microscope cannot take any brighter 6 images than this? 7 MS. O'DELL: Object to the 8 form. 9 MR. LUDWIG: Object to the 10 form. 11 THE WITNESS: That is the 12 brightest I could get for that particular 13 mount. 14 BY MR. DUBIN: 15 Q. Okay. And, for example, if we just 16 look at page 85 of this, we can see the 17 perpendicular. 18 Is it your testimony that this 19 type of image is taken at maximum brightness 20 on the Leica? 21 MS. O'DELL: Object to the 22 form. 23 THE WITNESS: It is. 24 BY MR. DUBIN: 25 Q. Okay. We'll come back to</p>

23 (Pages 86 - 89)

<p style="text-align: right;">Page 90</p> <p>1 illumination in a bit, but let's first just 2 talk a little bit about the switch that was 3 made at some point to 1.560 oil. 4 Do you know why that switch was 5 made in your analysis? 6 MR. DUBIN: You can take this 7 down, Jake. 8 THE WITNESS: The switch was 9 made at the suggestion -- I don't recall his 10 name, but he was in, talking with Dr. Longo; 11 and he was back, watching me do some work; and 12 he made the suggestion because of the intense 13 stretch of yellow on the color chart for 1.55, 14 that we do it with 1.560 to better define the 15 upper level of what we were finding in the 16 chrysotile. 17 MR. LUDWIG: I think the 18 question went to switching microscopes. 19 MR. DUBIN: No. He understood 20 the question. It was why the oil was 21 switched. 22 MR. LUDWIG: I'm sorry. 23 BY MR. DUBIN: 24 Q. Okay. And what is the expected 25 effect if you are switching from 1.550 to 1.60</p>	<p style="text-align: right;">Page 92</p> <p>1 bit. Let's put that in chat and we can go to 2 page 32 of it. Sorry. Is it page 32? It 3 should be the image. Okay. 4 Well, let's -- I will -- we can 5 just take the break now. I will leave that in 6 chat so that if anybody needs it over the 7 break. 8 What are we going to take? Ten 9 minutes? 10 MR. LUDWIG: Ten minutes is 11 great. 12 MR. DUBIN: All right. We can 13 do ten minutes. 14 VIDEOGRAPHER: The time is 15 11:19 a.m. We are off the record. 16 (Break held off the record.) 17 VIDEOGRAPHER: The time is 18 11:37 a.m. We are back on the record. 19 MR. DUBIN: We are going to 20 start talking about the Valadez report and the 21 Valadez report -- if we can put it back up? 22 We can just go to the front cover first and 23 then we'll come back here to the image. Okay. 24 BY MR. DUBIN: 25 Q. So the -- this is what we referred</p>
<p style="text-align: right;">Page 91</p> <p>1 oil? 2 A. We didn't switch to 1.60. 3 Q. Sorry. What did you say? 4 A. That we didn't switch to 1.60. 5 Q. You didn't switch to 1.560? Maybe I 6 misspoke. 7 What is the expected effect of 8 switching to one, five -- 1.560 oil? 9 MR. LUDWIG: I'm going to 10 object; that calls for an expert opinion. I 11 am instructing the witness not to answer that 12 question. 13 MR. DUBIN: Okay. Well, I want 14 to call up -- let's just mark the Valadez 15 report as the next exhibit in order. I guess 16 that's 14. 17 (Exhibit 14 marked for 18 identification.) 19 MR. LUDWIG: Mr. Dubin, we have 20 been going for close to an hour and fifteen. 21 Do you want to just do this last one and then 22 take a break? 23 MR. DUBIN: I'll call up -- 24 I'll put up the report and I'll put it in chat 25 because we're going to talk about it for a</p>	<p style="text-align: right;">Page 93</p> <p>1 to as the Valadez report from 2023. 2 So we would be taking about a 3 Leica microscope, correct? 4 A. That is correct. 5 Q. And we're talking now about using 6 1.560 oil, right? 7 A. Yes, sir. 8 Q. Okay. And so let's go to that image 9 first. 10 MS. O'DELL: For the record, 11 what page in the PDF? 12 MR. DUBIN: What page is that, 13 Jake? 14 MR. KEESTER: This is PDF page 15 33. 16 MR. DUBIN: It's particle CSM 17 001. 18 BY MR. DUBIN: 19 Q. Now, I want to just quickly flip 20 back to the Zimmerman report we have already 21 looked at, the image, and if we can just look 22 at the image we had up before. 23 Can you see that the image in 24 the Zimmerman report is more golden or orange 25 than the image in the Valadez report? We can</p>

<p style="text-align: right;">Page 94</p> <p>1 go back and forth between them if you need to.</p> <p>2 MR. DUBIN: Can we flip back to</p> <p>3 Valadez?</p> <p>4 BY MR. DUBIN:</p> <p>5 Q. Do you see that the Zimmerman report</p> <p>6 image is more golden or orange?</p> <p>7 A. I do.</p> <p>8 Q. Do you know why that is?</p> <p>9 A. From the BH2, which is the Zimmerman</p> <p>10 report, we were on a tungsten lamp, and it was</p> <p>11 to the respect that we were dealing with extra</p> <p>12 yellows from the tungsten lamp.</p> <p>13 Q. So the tungsten lamp was changing</p> <p>14 the color of the particle then?</p> <p>15 MS. O'DELL: Object to the</p> <p>16 form.</p> <p>17 MR. LUDWIG: Object to form.</p> <p>18 BY MR. DUBIN:</p> <p>19 Q. Is that correct?</p> <p>20 MS. O'DELL: Object to the</p> <p>21 form.</p> <p>22 THE WITNESS: We felt it was</p> <p>23 adding more yellow to the image of what we</p> <p>24 were seeing and what we were documenting.</p> <p>25 BY MR. DUBIN:</p>	<p style="text-align: right;">Page 96</p> <p>1 your question was.</p> <p>2 MR. DUBIN: We can read the</p> <p>3 question back.</p> <p>4 THE COURT REPORTER: One</p> <p>5 moment.</p> <p>6 "QUESTION: And it wasn't just</p> <p>7 adding yellow. If we go back to the</p> <p>8 Zimmerman image, it was adding sort of</p> <p>9 darker golden colors or orange colors to</p> <p>10 the image, right?"</p> <p>11 MS. O'DELL: Object to the</p> <p>12 form.</p> <p>13 MR. LUDWIG: I am going to</p> <p>14 stand by my objection.</p> <p>15 MR. DUBIN: So you're not just</p> <p>16 objecting. You're instructing him not to</p> <p>17 answer that question. I need to understand</p> <p>18 that.</p> <p>19 MR. LUDWIG: Correct.</p> <p>20 MR. DUBIN: So if I ask him any</p> <p>21 questions trying to compare various images in</p> <p>22 his reports, are you going to instruct him not</p> <p>23 to answer that?</p> <p>24 MS. O'DELL: You can proceed</p> <p>25 with your deposition, Morty. It's no way</p>
<p style="text-align: right;">Page 95</p> <p>1 Q. Okay. And it wasn't just adding</p> <p>2 yellow. If we go back to the Zimmerman report</p> <p>3 image, it was adding sort of darker golden</p> <p>4 colors or orange colors to the image, right?</p> <p>5 MS. O'DELL: Object to form.</p> <p>6 MR. LUDWIG: Objection. This</p> <p>7 calls for an expert opinion.</p> <p>8 I will instruct you not to</p> <p>9 answer that one.</p> <p>10 MR. DUBIN: You're instructing</p> <p>11 him not to answer that question about the</p> <p>12 comparison between these two images?</p> <p>13 MR. LUDWIG: Correct. You're</p> <p>14 testifying and I am going to object to that</p> <p>15 one.</p> <p>16 MR. DUBIN: You're objecting</p> <p>17 and you're instructing your witness not to</p> <p>18 answer a question about the impact of lighting</p> <p>19 on his images in the reports at issue in this</p> <p>20 deposition and you're instructing him not to</p> <p>21 answer.</p> <p>22 Is that my understanding?</p> <p>23 MR. LUDWIG: Could you -- let</p> <p>24 me hear the question again because I think</p> <p>25 you -- what you said was different than what</p>	<p style="text-align: right;">Page 97</p> <p>1 to -- to respond to that. I mean --</p> <p>2 MR. DUBIN: Okay. I just --</p> <p>3 we're obviously going to have to deal with</p> <p>4 this after the end of the questioning today,</p> <p>5 but we'll proceed.</p> <p>6 MS. O'DELL: I am not finished.</p> <p>7 MR. DUBIN: Okay.</p> <p>8 MS. O'DELL: Stop interrupting,</p> <p>9 please. If you ask him questions about the</p> <p>10 image and the work that he did, he is</p> <p>11 available to answer your question. He is not</p> <p>12 here to offer expert opinion. It has been</p> <p>13 stated numerous times.</p> <p>14 MR. DUBIN: I am asking him</p> <p>15 directly about his images right now. So --</p> <p>16 and he is still being instructed not to</p> <p>17 answer.</p> <p>18 BY MR. DUBIN:</p> <p>19 Q. So, again, I am asking you a</p> <p>20 question about this image.</p> <p>21 The tungsten lighting is not</p> <p>22 just adding more yellow; it's adding golden</p> <p>23 colors and more orange color to the images,</p> <p>24 right? Is that correct?</p> <p>25 MR. LUDWIG: Object.</p>

25 (Pages 94 - 97)

<p style="text-align: right;">Page 98</p> <p>1 I instruct you not to answer. 2 MR. DUBIN: You're instructing 3 him not to answer that question. Okay. 4 BY MR. DUBIN: 5 Q. And if we -- if we look at the 6 Valadez image, the effect of changing the 7 refractive index oil should have been to make 8 the particles less yellow, right? To move the 9 yellows towards the range of magenta, correct? 10 A. It was done to make it easier to 11 determine the upper refractive indices. 12 Q. But by -- if I have a particle that 13 is orange in parallel in 1.550 and I change my 14 oil to 1.560, it should appear more magenta, 15 right -- 16 MS. O'DELL: Objection. 17 BY MR. DUBIN: 18 Q. -- in the magenta range? 19 MS. O'DELL: Excuse me. 20 Objection. Seeks expert opinion. 21 MR. LUDWIG: Join. 22 I instruct the witness not to 23 answer. 24 BY MR. DUBIN: 25 Q. What color is this particle that you</p>	<p style="text-align: right;">Page 100</p> <p>1 MR. DUBIN: Right. And so it's 2 also clear, it's CSM 001. 3 BY MR. DUBIN: 4 Q. Do you see rounded structures here 5 that you believe to be talc plates? 6 A. There are. 7 Q. And do you see that some of those 8 rounded structures have some red coloration 9 around the edges? 10 Do you see that? 11 A. I cannot -- 12 Q. (Inaudible.) 13 A. -- the edge color -- 14 MS. O'DELL: He was not 15 finished; so. 16 BY MR. DUBIN: 17 Q. What was the answer? 18 A. I cannot determine the edge colors 19 from the photograph as presented. 20 Q. You don't see red edges on the talc 21 plates? 22 MR. LUDWIG: Asked and 23 answered. 24 THE WITNESS: I don't on the 25 photograph as presented.</p>
<p style="text-align: right;">Page 99</p> <p>1 identified as chrysotile? What color is it? 2 A. Please, focus in. 3 Q. (Counsel complies.) 4 MS. O'DELL: Again, this is 5 page 33 of the Valadez report and that's being 6 shown on the screen? 7 MR. DUBIN: It may be page 32, 8 I think, but I don't know. Is it 33 or 32, 9 Jake? 10 MR. KEESTER: I have it as PDF 11 33. 12 MR. DUBIN: Okay. PDF 33. 13 THE WITNESS: It has a mottled 14 appearance, some yellow, but I cannot 15 ascertain the edge off of the photograph. 16 MR. DUBIN: Okay. 17 MS. O'DELL: And, Morty, just 18 to correct the record, I believe that this is 19 page 32 of the Valadez -- 20 MR. DUBIN: I said 32. It may 21 just be PDF 33. 22 MS. O'DELL: I am looking at 23 the actual report. The PDF report is 32 just 24 so it's clear when we go back what we're 25 looking at.</p>	<p style="text-align: right;">Page 101</p> <p>1 BY MR. DUBIN: 2 Q. Is red a central stop dispersion 3 color that is associated with talc itself in 4 1.550 or 1.560? 5 A. I am not aware that it is. 6 Q. Do you ever go through any process 7 to calibrate your dispersion staining colors? 8 A. We do that. 9 Q. And how do you do that? How did you 10 do that? 11 A. I didn't do them. There was 12 somebody else in the lab that did them. 13 Q. Do you know what the process was? 14 A. Initially, it was through the 15 Cargille glass solids. 16 Q. Cargille glass? 17 A. Yes, and -- 18 Q. And -- 19 MS. O'DELL: Sorry. He is not 20 finished. 21 BY MR. DUBIN: 22 Q. Go ahead. 23 A. And then recently was acquired a 24 refractive scope where you can check your 25 index difference.</p>

<p style="text-align: right;">Page 102</p> <p>1 Q. And Cargille -- those Cargille glass 2 standards have a single refractive index; is 3 that right? 4 A. That is correct. 5 Q. Meaning that they only have one true 6 central stop dispersion staining color; is 7 that correct? 8 A. That is correct. 9 Q. Okay. Can you still see sometimes 10 edges on the Cargille glass that show a 11 different color, not their true central stop 12 dispersion staining color? Can you sometimes 13 see edges on them of different colors? 14 MS. O'DELL: Objection to the 15 form to the degree it's talking about a 16 process that he did not do himself. 17 BY MR. DUBIN: 18 Q. Just only if you know personally? 19 MS. O'DELL: And do not 20 speculate, please, Mr. Hess. If you -- if 21 that's a process you were involved in for 22 purposes of your work in this case, you can 23 respond, but if it was not, well, that's 24 beyond the scope, and that's expert opinion. 25 THE WITNESS: I did not do the</p>	<p style="text-align: right;">Page 104</p> <p>1 A. I am unfamiliar with the term. 2 Q. If we scroll down so we can see the 3 bottom of this, you see that there is a 4 refractive index number, 1.564; that is the 5 refractive index number that you assigned to 6 this particle; is that correct? 7 A. That is correct. 8 Q. Do you know what color that 9 refractive index number corresponds to in 10 1.560 oil? 11 A. Without the temperature information 12 handy and without the actual charts utilized, 13 it was more of a. 14 Q. So are you done with your answer? 15 A. I don't recall exactly off the top 16 of my head. 17 Q. Well, let's go through the process 18 so we understand how you can take that 19 refractive index number and determine what 20 color you were calling this particle. 21 And so I am going to show you a 22 couple different slides. We can just mark 23 them as separate exhibits. We can just start 24 with slide 34. 25 THE COURT REPORTER: For the</p>
<p style="text-align: right;">Page 103</p> <p>1 calibrations -- 2 BY MR. DUBIN: 3 Q. Are you -- 4 A. -- just said. 5 Q. Are you familiar with the fact that 6 you can -- that even with Cargille glass that 7 has a single refractive index, you can 8 sometimes see edge colors that don't 9 correspond to that refractive index? 10 MS. O'DELL: Objection; seeks 11 expert opinion beyond the scope of the 12 deposition. I will let Mr. Hess' counsel 13 instruct him. 14 MR. LUDWIG: I am going to 15 instruct him not to answer that question. 16 BY MR. DUBIN: 17 Q. Do you know what total reflection 18 means in the context of PLM dispersion 19 staining? 20 MS. O'DELL: Same objection. 21 MR. LUDWIG: Is the question 22 does he know what total dispersion -- repeat, 23 please? 24 BY MR. DUBIN: 25 Q. Total reflection.</p>	<p style="text-align: right;">Page 105</p> <p>1 record, I believe this is Exhibit 15. 2 MR. DUBIN: Thank you. 3 (Exhibit 15 marked for 4 identification.) 5 BY MR. DUBIN: 6 Q. Do you know the temperature in the 7 lab at MAS? 8 A. We did have an immersion thermometer 9 at station. 10 Q. And what is the temperature? 11 A. It was 21 degrees. 12 Q. And so if we wanted to figure out 13 what color you're calling the particle, we 14 could look at the Su tables or 1.560, and we 15 take your RI given, right, and then we can 16 match that up with a wavelength of light, 17 correct? 18 A. Correct. 19 MS. O'DELL: I object to the 20 question. 21 Where did this table -- what 22 reference did this table come from? 23 MR. DUBIN: You're familiar 24 with the Su tables. We can mark them as an 25 exhibit if it's necessary. I will mark the Su</p>

27 (Pages 102 - 105)

<p style="text-align: right;">Page 106</p> <p>1 tables so we have them. I will mark the Su 2 tables as Exhibit 35. I guess it must be 3 CX-26. 4 MR. LUDWIG: My understanding, 5 this is a document prepared by defense 6 counsel. This is not the Su tables. This is 7 an excerpt, table, picture of Dr. Su, and some 8 other things; is that correct? 9 MR. DUBIN: An excerpt and 10 that's why in case you need it, I am marking 11 the entire document as the next exhibit. 12 MR. LUDWIG: Okay. Well, now I 13 am objecting to testimony about this document 14 then. 15 MR. DUBIN: What is your 16 possible objection about my asking him about 17 the color of the particle in the report that 18 he is here to be deposed about? 19 MR. LUDWIG: I am objecting to 20 this exhibit 15, which is a defense exhibit -- 21 MR. DUBIN: It's -- 22 MR. LUDWIG: -- that's what I 23 am objecting to. 24 MR. DUBIN: Okay. So, 25 Mr. Placitella, do you agree and say that you</p>	<p style="text-align: right;">Page 108</p> <p>1 I understand you're going to 2 put the Su tables that you're referring to in 3 the chat and so if you go ahead and do that 4 and I assume they are going to be marked as 5 exhibit 16; is that correct? 6 MR. DUBIN: I think that's the 7 correct number. Exhibit 16 will be the Su 8 tables. 9 MS. O'DELL: And if you need to 10 see the Su tables, Mr. Hess, or anything else, 11 just request that, and we'll get it in front 12 of you. 13 MR. DUBIN: That's fine. 14 (Exhibit 16 marked for 15 identification.) 16 BY MR. DUBIN: 17 Q. Anyway, so you can look at the RI 18 that you gave, 1.564, and that will correspond 19 with a wavelength of light, correct? 20 A. That is correct. 21 Q. And we can see that the wavelength 22 of -- the color associated with that 23 wavelength of light is purple, right, 560 24 nanometers? 25 A. In the color chart, that's what it</p>
<p style="text-align: right;">Page 107</p> <p>1 can never use a demonstrative created by 2 counsel as part of examining a witness? 3 Because I am curious about your view on that, 4 Mr. Placitella. So no more creating exhibits 5 to ask -- or demonstratives to ask our 6 witnesses about, right, Mr. Placitella, or do 7 you disagree with -- 8 MR. LUDWIG: (Inaudible) -- 9 MR. PLACITELLA: You're now 10 asking me questions? 11 MR. DUBIN: I am asking you 12 that question. 13 MR. PLACITELLA: How about I 14 ask you a few? 15 BY MR. DUBIN: 16 Q. All right. I am going to continue 17 to ask you questions about this document. 18 So going back to this, you can 19 find on the table -- 20 MS. O'DELL: Morty, excuse me. 21 The reason I asked is so if this is a 22 defense-created exhibit, so we understand 23 what's being discussed and for the record, 24 first; and then, second, so Mr. Hess has an 25 understanding of what's being asked of him.</p>	<p style="text-align: right;">Page 109</p> <p>1 shows. 2 Q. So for purposes of your analysis 3 calling this chrysotile, you were treating 4 this particle as if it was purple, correct? 5 MS. O'DELL: Object to the 6 form. 7 THE WITNESS: I was treating 8 what I could see around the edges through my 9 scope. 10 BY MR. DUBIN: 11 Q. And, in fact, if we -- if we look 12 back at what we looked at before, which was 13 reference chrysotile -- we can put that slide 14 back up. 15 MR. DUBIN: I don't remember 16 what number it was, but for calling it up, 17 Jake, we can use slide 40. 18 BY MR. DUBIN: 19 Q. Reference chrysotile, the refractive 20 index number given for that particle by ISO is 21 1.556; that corresponds to magenta, correct? 22 MS. O'DELL: Object to the 23 form. 24 We had an objection previously 25 to this exhibit because it calls for an expert</p>

28 (Pages 106 - 109)

<p style="text-align: right;">Page 110</p> <p>1 opinion and so --</p> <p>2 MR. DUBIN: Are you instructing</p> <p>3 him not to answer?</p> <p>4 MR. LUDWIG: I am instructing</p> <p>5 him not to answer for the reasons stated</p> <p>6 before.</p> <p>7 MR. DUBIN: Okay. Let's go</p> <p>8 to -- make the next exhibit slide 43.</p> <p>9 MR. KEESTER: I'm sorry, Morty.</p> <p>10 That was 43?</p> <p>11 MR. DUBIN: Yeah, and that will</p> <p>12 be exhibit 17.</p> <p>13 (Exhibit 17 marked for</p> <p>14 identification.)</p> <p>15 BY MR. DUBIN:</p> <p>16 Q. The number -- the wavelength of</p> <p>17 light that you assigned to this particle on</p> <p>18 the left that you're calling chrysotile in</p> <p>19 Johnson & Johnson, you are saying that it is</p> <p>20 even more purple than standard reference</p> <p>21 chrysotile depicted on the right, correct?</p> <p>22 MS. O'DELL: Objection.</p> <p>23 This is an incomplete depiction</p> <p>24 of what's being examined. It is including</p> <p>25 images that are not Dr. -- Mr. Hess', excuse</p>	<p style="text-align: right;">Page 112</p> <p>1 to an ISO record for chrysotile and that is</p> <p>2 beyond the scope of this deposition.</p> <p>3 That's -- that is --</p> <p>4 MR. DUBIN: Are you instructing</p> <p>5 him not to answer?</p> <p>6 MS. O'DELL: Let me finish.</p> <p>7 I'm sorry. Let me finish. I stuttered there.</p> <p>8 Judge Schneider was very clear</p> <p>9 that he is going to be asked about his work</p> <p>10 and not a comparison of his work to others and</p> <p>11 that is expert opinion and that's why we're</p> <p>12 instructing him not to answer.</p> <p>13 MR. DUBIN: Okay. So you're</p> <p>14 instructing him not to answer?</p> <p>15 MR. LUDWIG: Correct.</p> <p>16 MR. DUBIN: Okay.</p> <p>17 BY MR. DUBIN:</p> <p>18 Q. I want to make sure and let me raise</p> <p>19 the question.</p> <p>20 As a fact, factually, you</p> <p>21 assigned a darker purple color to that</p> <p>22 particle on the left than standard reference</p> <p>23 chrysotile, correct?</p> <p>24 MS. O'DELL: Objection; that is</p> <p>25 the same objection, and I just also object to</p>
<p style="text-align: right;">Page 111</p> <p>1 me, and it is an inappropriate examination of</p> <p>2 this witness, who is a fact witness, and seeks</p> <p>3 expert opinion, and we to object to it.</p> <p>4 MR. DUBIN: First off, I don't</p> <p>5 understand how you can say every time that he</p> <p>6 is a fact witness and not an expert. He is</p> <p>7 here to be deposed about his polarized light</p> <p>8 microscopy work. There is no way to depose</p> <p>9 someone about their polarized light microscopy</p> <p>10 work without asking them questions that are</p> <p>11 technical in nature.</p> <p>12 And so if your objection is</p> <p>13 that every time I ask him for something about</p> <p>14 his conclusions, it's an expert opinion, then</p> <p>15 you are essentially shutting down this</p> <p>16 deposition. It's --</p> <p>17 MS. O'DELL: That's not</p> <p>18 correct. We're asking -- we have not</p> <p>19 instructed Mr. Hess to not respond to</p> <p>20 questions that are technical. We have</p> <p>21 instructed him not to give expert opinion</p> <p>22 because he is here as a fact witness as you</p> <p>23 know and as the Special Master has ruled.</p> <p>24 And this seeks a comparison</p> <p>25 between the photomicrograph that Mr. Hess took</p>	<p style="text-align: right;">Page 113</p> <p>1 use of this color chart without reference to</p> <p>2 the other charts from Dr. Su's tables that</p> <p>3 take into consideration the temperature and</p> <p>4 other aspects of the table. It's an</p> <p>5 incomplete hypothetical. He --</p> <p>6 MR. DUBIN: I am sorry. I</p> <p>7 don't think you understand the -- I don't</p> <p>8 think you understand how the analysis works.</p> <p>9 Because we already did the temperature of the</p> <p>10 lab when we figured out what nanometer of</p> <p>11 light he was calling the particle. So that is</p> <p>12 not a valid objection scientifically. Are you</p> <p>13 instructing him not to answer?</p> <p>14 MS. O'DELL: I am going to let</p> <p>15 Mr. Hess' counsel instruct him, but I have</p> <p>16 made my objection.</p> <p>17 MR. LUDWIG: I am instructing</p> <p>18 him not to answer.</p> <p>19 MR. PLACITELLA: I would just</p> <p>20 like to -- can you hear me? I would just like</p> <p>21 to add the following objection and I am trying</p> <p>22 to stay out of this.</p> <p>23 If you're taking a tiny, little</p> <p>24 piece of a big slide and then blowing -- and</p> <p>25 then sticking it next to a different slide,</p>

<p style="text-align: right;">Page 114</p> <p>1 there is no guarantee that this accurately 2 depicts what the actual slide looks like, 3 especially on a Zoom presentation. So that's 4 my concern to put on the record. 5 MR. DUBIN: Okay. And my -- 6 MR. PLACITELLA: Now I'll go 7 back to sleep. 8 MR. DUBIN: My response to that 9 is we're comparing the colors associated with 10 two different nanometers of light, which are 11 depicted accurately on the slide, and I 12 understand that you guys are instructing him 13 not to answer and okay. So we'll have to deal 14 with that later. 15 MR. PLACITELLA: No, no, but my 16 objection was beyond that. My objection was 17 how this was put together, who put the colors 18 on what piece of the photograph and, you know, 19 what someone is being asked to interpret over 20 Zoom; that's all. Now I will go back to 21 sleep. 22 MR. DUBIN: Yeah. Okay. 23 BY MR. DUBIN: 24 Q. So let's go back to the Valadez 25 report.</p>	<p style="text-align: right;">Page 116</p> <p>1 Q. How can we independently verify with 2 your report that that particle is purple 3 without actually being at your scope? 4 MS. O'DELL: Objection. 5 MR. LUDWIG: Objection; calls 6 for -- objection to form. 7 BY MR. DUBIN: 8 Q. You can respond. 9 A. So I do the documentation on the 10 pictures. 11 Q. But you're telling me that the 12 pictures don't show the purple. 13 So how can we independently -- 14 how can we verify that that particle, in fact, 15 has purple? 16 MS. O'DELL: Objection; 17 misstates his testimony. 18 MR. LUDWIG: Join. 19 THE WITNESS: It's documented 20 as part of the report. It's in the picture. 21 BY MR. DUBIN: 22 Q. So you're saying that purple is in 23 the picture. 24 So where is the purple? 25 MS. O'DELL: Objection;</p>
<p style="text-align: right;">Page 115</p> <p>1 Are you -- are you swearing 2 that particle as purple in -- 3 MS. O'DELL: Object to -- 4 THE COURT REPORTER: Please 5 repeat your question. 6 BY MR. DUBIN: 7 Q. Are you swearing that that particle 8 is purple, the one depicted in 001? 9 MR. LUDWIG: Objection to form. 10 THE WITNESS: No. The particle 11 itself interior-wise has yellow. I utilized 12 what I could find through the scope around the 13 edges or at the edge. 14 BY MR. DUBIN: 15 Q. So are you telling me that that 16 particle we're looking at is somehow entirely 17 surrounded with purple, but we just can't see 18 it? 19 MS. O'DELL: Objection to the 20 form; asked and answered. 21 MR. LUDWIG: Argumentative. 22 BY MR. DUBIN: 23 Q. You can respond. 24 A. Based on what I saw through the 25 microscope.</p>	<p style="text-align: right;">Page 117</p> <p>1 misstates his testimony. 2 BY MR. DUBIN: 3 Q. You can respond. 4 A. I make my determinations on what I 5 can see through the scope and it's represented 6 to the best that I can get it on the screen in 7 the picture. 8 Q. Okay. But can we verify that with 9 the picture? Can we verify that in some way? 10 A. Other than what's on the picture, 11 Counselor, I cannot speculate. 12 MR. LUDWIG: Do you need it 13 blown up? 14 MR. DUBIN: We can blow it up. 15 MR. PLACITELLA: There it is. 16 BY MR. DUBIN: 17 Q. Do you see purple or red on the talc 18 plates in this image? To the extent you're 19 claiming you see it on that particle, do you 20 see it on all the rounded talc plates? 21 A. On this image, I can just barely. 22 Q. On the rounded talc plates, right? 23 MR. LUDWIG: Listen to the 24 question. 25 BY MR. DUBIN:</p>

30 (Pages 114 - 117)

<p style="text-align: right;">Page 118</p> <p>1 Q. You can see those kind of edge 2 effects on the talc plates as well, right? 3 MS. O'DELL: I am -- the screen 4 is about ten feet away from Mr. Hess. I am 5 handing him the Valadez report on my computer 6 so he can see it more clearly. 7 BY MR. DUBIN: 8 Q. Do you see those same kind of edge 9 effects on all -- on the talc plates? 10 A. I can see parts, yes. 11 Q. But talc plates aren't purple in 12 1.560 oil, right, and they are not red, 13 correct? 14 MS. O'DELL: And if you need to 15 make it bigger or smaller, Mr. Hess, you can 16 just -- you can touch my screen. 17 BY MR. DUBIN: 18 Q. You can focus on any of these 19 rounded talc plates and you'll see the same 20 edge effects, right? 21 MS. O'DELL: Object to the 22 form. 23 THE WITNESS: Similar. 24 BY MR. DUBIN: 25 Q. So what refractive index number</p>	<p style="text-align: right;">Page 120</p> <p>1 A. At least my opinion of what I am 2 seeing not only on the dispersion staining, 3 but also on the appearance of the structure, 4 whether it shows fibrousity. 5 Q. You are basing your refractive 6 index -- 7 MS. O'DELL: Excuse me. Were 8 you finished with your answer? 9 THE WITNESS: It's based on 10 what I see through the scope and my 11 examination of the particle. 12 BY MR. DUBIN: 13 Q. You are basing your assessment of 14 the refractive index of this particle that 15 you're calling chrysotile based on edge 16 effects that are also present on the rounded 17 talc plates, correct? 18 MS. O'DELL: Objection; 19 misstates his testimony. 20 BY MR. DUBIN: 21 Q. You can respond. 22 A. I base it on what I see around the 23 particle itself. 24 Q. And those -- again, my question is, 25 what you're claiming -- the effect that you're</p>
<p style="text-align: right;">Page 119</p> <p>1 would you assign to any of the talc plates 2 that also have that edge effect? What would 3 you -- what is the refractive index of the 4 talc plates? 5 MS. O'DELL: Object to the 6 form; expert opinion. 7 MR. LUDWIG: This is an expert 8 opinion. I am going to instruct him not to 9 answer that one. 10 BY MR. DUBIN: 11 Q. Mr. Hess, you're basing your calling 12 this particle chrysotile on edge effects that 13 are also present on the talc plates 14 themselves; isn't that right? 15 MS. O'DELL: Objection; 16 misstates his testimony. 17 BY MR. DUBIN: 18 Q. You can respond. 19 MS. O'DELL: Objection; 20 misstates his testimony. 21 MR. LUDWIG: Join. 22 MS. O'DELL: Seeks expert 23 opinion. 24 BY MR. DUBIN: 25 Q. You can respond.</p>	<p style="text-align: right;">Page 121</p> <p>1 claiming to see around that particle you're 2 calling chrysotile is also present on the 3 round talc plates, correct? 4 MS. O'DELL: Objection. 5 MR. LUDWIG: Objection, asked 6 and answered. 7 MS. O'DELL: Misstates his 8 testimony. 9 BY MR. DUBIN: 10 Q. You can respond. 11 A. I am basing it on my determination 12 from what's around the particle. I do not 13 take into account what's around the talc. 14 Q. Okay. So you don't consider whether 15 or not, because this effect is also on the 16 talc plates, whether it's an artifact of 17 your -- of your analysis? You don't look at 18 the talc plates to see whether you see the 19 exact same effect on the talc plates? 20 MS. O'DELL: Objection; 21 misstates his testimony. It's not what he 22 testified a moment ago. 23 BY MR. DUBIN: 24 Q. Are these talc plates, are those 25 also purple, according to you, if you're</p>

<p style="text-align: right;">Page 122</p> <p>1 looking at the edge effects?</p> <p>2 A. What I am seeing on there is more of</p> <p>3 a red, but it's not in focus to the point that</p> <p>4 I would be able to make a determination.</p> <p>5 Q. So would the refractive -- would the</p> <p>6 refractive index value for those talc plates</p> <p>7 correspond to red?</p> <p>8 MS. O'DELL: Objection.</p> <p>9 He was just saying it wasn't in</p> <p>10 focus and you can't make that determination</p> <p>11 from a photomicrograph on a screen.</p> <p>12 BY MR. DUBIN:</p> <p>13 Q. So are those talc plates -- does the</p> <p>14 refractive index that you assigned to them</p> <p>15 based on their edges, does that correspond to</p> <p>16 red?</p> <p>17 MS. O'DELL: Same objection.</p> <p>18 BY MR. DUBIN:</p> <p>19 Q. You can respond.</p> <p>20 A. I would not give it the same.</p> <p>21 THE COURT REPORTER: Please</p> <p>22 repeat your answer.</p> <p>23 MR. LUDWIG: I think it was: I</p> <p>24 would not give it the same.</p> <p>25 I think you were still talking?</p>	<p style="text-align: right;">Page 124</p> <p>1 MR. PLACITELLA: -- trying to</p> <p>2 keep the record clean.</p> <p>3 MR. DUBIN: Okay.</p> <p>4 BY MR. DUBIN:</p> <p>5 Q. What CSDS color are you assigning to</p> <p>6 the talc plates that we're looking at?</p> <p>7 MS. O'DELL: Object to the</p> <p>8 form; that seeks expert opinion. He is not</p> <p>9 a -- he did not analyze these particular talc</p> <p>10 particles. He didn't make findings in the</p> <p>11 report.</p> <p>12 To ask him to do it on the fly,</p> <p>13 in a Zoom is an expert opinion and beyond the</p> <p>14 scope of what he did for the report and we</p> <p>15 object on that basis.</p> <p>16 MR. DUBIN: Are you instructing</p> <p>17 him not to answer the question?</p> <p>18 MR. LUDWIG: I was just going</p> <p>19 to say, exactly, and I am instructing him not</p> <p>20 to answer that question because he is not --</p> <p>21 it's not the scope. Him doing an analysis of</p> <p>22 a talc particle on the fly is not what the</p> <p>23 Judge -- is not the purpose of this</p> <p>24 deposition.</p> <p>25 MR. DUBIN: Okay. You have</p>
<p style="text-align: right;">Page 123</p> <p>1 THE WITNESS: No; that's it. I</p> <p>2 would not give it the same.</p> <p>3 BY MR. DUBIN:</p> <p>4 Q. So what is the CSDS color of, let's</p> <p>5 say, this large talc plate towards the bottom</p> <p>6 left? What is the CSDS color that you would</p> <p>7 use to assign a refractive index to that</p> <p>8 particle?</p> <p>9 MS. O'DELL: Which particle?</p> <p>10 MR. PLACITELLA: I will place</p> <p>11 an objection before he answers and I know</p> <p>12 you're doing the best you can, but at this</p> <p>13 point, at least on the screen that I am</p> <p>14 seeing, this image is pretty blurry, you know,</p> <p>15 but you did -- you're doing the best you can.</p> <p>16 MR. DUBIN: This is the image</p> <p>17 that we have from Dr. Longo.</p> <p>18 MR. PLACITELLA: Well, that's</p> <p>19 not necessarily the image. This is a blowup</p> <p>20 on a Zoom, you know.</p> <p>21 MR. DUBIN: He also has the</p> <p>22 actual report in front of him on a computer.</p> <p>23 Now what?</p> <p>24 MR. PLACITELLA: Just --</p> <p>25 MR. DUBIN: Okay.</p>	<p style="text-align: right;">Page 125</p> <p>1 instructed him not to answer. We'll just deal</p> <p>2 with it in court later.</p> <p>3 Let's look at the second image,</p> <p>4 002.</p> <p>5 MS. O'DELL: Okay. What image</p> <p>6 are you looking at and what page?</p> <p>7 MR. DUBIN: Okay. So, Jake,</p> <p>8 can you give the page? This is the image of</p> <p>9 CSM 002.</p> <p>10 MR. KEESTER: So my PDF is page</p> <p>11 38, but since your report seems to be one page</p> <p>12 less, it will probably be page 37, but it is</p> <p>13 CSM-002.</p> <p>14 MS. O'DELL: Okay.</p> <p>15 BY MR. DUBIN:</p> <p>16 Q. What color is that particle?</p> <p>17 A. Can you zoom in, please?</p> <p>18 Q. Sure.</p> <p>19 A. The particle itself, yellow with</p> <p>20 some pale blue.</p> <p>21 Q. Okay. And do you see that there is</p> <p>22 a rounded talc plate? If you move your eye</p> <p>23 from the top of the two arrows over towards</p> <p>24 the left, there is a rounded talc plate.</p> <p>25 Do you see that?</p>

32 (Pages 122 - 125)

<p style="text-align: right;">Page 126</p> <p>1 MR. LUDWIG: Objection. 2 Once again, you're asking him 3 to analyze what you claim to be a talc 4 particle on the fly; that calls for expert 5 testimony. I am instructing him not to answer 6 that question. 7 BY MR. DUBIN: 8 Q. You said you have done PLM 9 dispersion staining analysis for 30 years, 10 Mr. Hess? 11 A. That is correct. 12 Q. Are you not -- are you not able to 13 tell me -- to follow over on the image and 14 look at this talc plate with me? Is that 15 beyond your experience and training? 16 MR. LUDWIG: I am going to 17 object. 18 This is argumentative. His 19 experience is under the microscope. So I am 20 objecting to the form of the question. It's 21 argumentative. 22 BY MR. DUBIN: 23 Q. Is the particle you're calling 24 chrysotile here, is that essentially the same 25 color as the talc plates in the image?</p>	<p style="text-align: right;">Page 128</p> <p>1 identification.) 2 BY MR. DUBIN: 3 Q. You -- for purposes of your 4 analysis, you're calling this particle 5 somewhere between a magenta and a purple for 6 purposes of your analysis, right? 7 MS. O'DELL: Just wait a 8 minute. 9 What particle is this? 10 MR. DUBIN: This is the same 11 particle, CSM 002. 12 BY MR. DUBIN: 13 Q. You're calling it somewhere between 14 a magenta and a purple for purposes of your 15 analysis? 16 A. I am calling the edge that I saw. 17 Q. You're calling the edge that you saw 18 purple and magenta? Is that what you're 19 saying? 20 A. That is correct. 21 Q. The same type of purple or red 22 colors that are on the talc plates? 23 MS. O'DELL: Object to the 24 form. 25 MR. LUDWIG: Object to the</p>
<p style="text-align: right;">Page 127</p> <p>1 MR. LUDWIG: Objection, same 2 objection. I am instructing him not to 3 answer. 4 MR. DUBIN: Okay. Can't wait 5 to be heard on these. All right. 6 BY MR. DUBIN: 7 Q. Do you know what -- if we go down 8 and we look at the RI value, RI 1.565, do you 9 know what color that -- by reporting that 10 refractive index value for this particle, do 11 you know what color you were calling it? 12 A. I don't recall. 13 MR. DUBIN: Let's go to the 14 slide, Jake, and we'll make that the next in 15 order, the slide for this particle; that will 16 be exhibit -- are we on 17 or 18? 17 THE COURT REPORTER: One moment 18 and I can verify. 19 MR. DUBIN: Sure. I think it's 20 18. 21 THE COURT REPORTER: Yes, this 22 is Exhibit 18. 23 MR. DUBIN: Why don't we call 24 up that slide and we can put it in chat. 25 (Exhibit 18 marked for</p>	<p style="text-align: right;">Page 129</p> <p>1 form. 2 I instruct you not to answer. 3 BY MR. DUBIN: 4 Q. Do you know -- as you adjust the 5 focus on a microscope up and down, do you know 6 whether you can -- if things are out of focus, 7 you can see a red edge on particles? Are you 8 familiar with that? 9 A. I have observed that. 10 Q. And so one way that you can get 11 these types of edges around particles is if 12 they are just not -- if they are -- is your 13 focus, depending on your focus, right? 14 MS. O'DELL: Object to the 15 form. 16 THE WITNESS: Correct. 17 BY MR. DUBIN: 18 Q. And without these edges, without 19 these sort of red colors at the edges, then 20 the CSDS color that you would have had to 21 assign to the particle would be -- would 22 correspond to yellow, right? 23 MR. LUDWIG: Objection to form. 24 That's calling for an expert 25 analysis, which he is not here to present</p>

<p style="text-align: right;">Page 130</p> <p>1 today. 2 MR. DUBIN: Are you instructing 3 your witness not to answer yet again? 4 MR. LUDWIG: I am instructing 5 him not to answer that one, yes. 6 MR. DUBIN: Okay. 7 BY MR. DUBIN: 8 Q. How can you tell whether or not the 9 red that you're seeing on the edges is an 10 artifact of focus? 11 A. By assuring that my particle is in 12 focus. 13 Q. Mr. Placitella was complaining that 14 the image is blurry. 15 Does it look completely in 16 focus to you? 17 MS. O'DELL: Object to the 18 form. 19 MR. LUDWIG: Join. 20 THE WITNESS: I base it on what 21 I see through the scope. 22 BY MR. DUBIN: 23 Q. Do you know whether or not edge 24 effects like that can be created by total 25 refraction even for an in focus particle? Do</p>	<p style="text-align: right;">Page 132</p> <p>1 MR. DUBIN: You asked -- okay. 2 I have told you the answer. I am asking him 3 about it. 4 MR. KEESTER: Sorry to jump in. 5 I can't share a slide while I have it open. 6 It's the way Microsoft applications work. So 7 I am sharing them the moment I close out of 8 PowerPoint. 9 MS. O'DELL: Okay. Thank you. 10 MR. DUBIN: Okay. We can go 11 back to the Valadez report. We can put that 12 one in chat. 13 BY MR. DUBIN: 14 Q. And as I said, I believe there was a 15 question pending before the objection. 16 Are you familiar with the fact 17 that the phenomena of total reflection can 18 create these kind of edge effects for 19 particles? 20 MR. LUDWIG: Can that be reread 21 back? I'm sorry. There was a break in the 22 question, maybe distorted by the Zoom. I am 23 sorry. 24 MR. DUBIN: It's fine. I 25 already asked him. He didn't know what the</p>
<p style="text-align: right;">Page 131</p> <p>1 you know that? 2 MS. O'DELL: Objection to the 3 form; calls for expert opinion. 4 Morty, this slide has not been 5 put in the chat and so we would request that 6 it be put in the chat. 7 MR. DUBIN: We're doing it. 8 Obviously, it takes a little time to do the 9 slides and it's not like you're not seeing the 10 whole document, but we'll put them in chat. 11 MS. O'DELL: We thank you and 12 we need to see them. It's important. 13 The second thing is, where did 14 this color bar, color chart come from on the 15 side and -- because it's unclear from what's 16 being -- 17 MR. DUBIN: These are slides 18 that have been presented to Dr. Longo before 19 for his testimony and that he has agreed to. 20 So these are -- this type of color bar was 21 used in the 104 hearings with Dr. Longo, in 22 addition to being used in his Eagles and Lonzo 23 depositions. 24 MS. O'DELL: That's completely 25 immaterial.</p>	<p style="text-align: right;">Page 133</p> <p>1 phenomena was earlier. So it's fine. Don't 2 worry about it. This next -- let's go to CSM 3 003. 4 BY MR. DUBIN: 5 Q. What color is the particle? 6 A. The particle appears to be yellow. 7 Q. Do you know at -- by assigning RI 8 1.568, do you know what color you were calling 9 this particle? 10 A. Not without the charts available. 11 Q. All right. You were -- do you know 12 you were calling this particle somewhere 13 between a magenta and purple? 14 MS. O'DELL: Objection to form. 15 MR. LUDWIG: Can you zoom in on 16 the particle, please? 17 MR. DUBIN: Sure. 18 BY MR. DUBIN: 19 Q. You're treating this particle for 20 purposes of your analysis as if it is magenta 21 and purple? 22 MS. O'DELL: Objection to the 23 form. 24 He said he can't -- cannot 25 determine that without the charts and other</p>

<p style="text-align: right;">Page 134</p> <p>1 materials used in --</p> <p>2 MR. LUDWIG: (Inaudible) it's</p> <p>3 clear to you. I mean, we're dealing with a</p> <p>4 situation where it's ten, fifteen feet from</p> <p>5 you; so.</p> <p>6 BY MR. DUBIN:</p> <p>7 Q. You're the analyst who did this</p> <p>8 work.</p> <p>9 What color were you calling it?</p> <p>10 MS. O'DELL: And just for the</p> <p>11 record, what's the page of the Valadez report?</p> <p>12 MR. KEESTER: Mine is page 43.</p> <p>13 Yours is probably page 42.</p> <p>14 MS. O'DELL: Thank you.</p> <p>15 MR. DUBIN: And maybe it will</p> <p>16 help. We can make exhibit 19 slide 48 and put</p> <p>17 that up.</p> <p>18 MR. LUDWIG: Mr. Dubin, we have</p> <p>19 been going for a little --</p> <p>20 MR. DUBIN: We'll break after</p> <p>21 this slide and we'll take lunch.</p> <p>22 MR. LUDWIG: We'll take a lunch</p> <p>23 break after this slide.</p> <p>24 (Exhibit 19 marked for</p> <p>25 identification.)</p>	<p style="text-align: right;">Page 136</p> <p>1 Q. Not the particle, what you're</p> <p>2 calling the edge effects, right, or the edges,</p> <p>3 you're saying?</p> <p>4 A. That is correct.</p> <p>5 Q. Okay. And we can go back to the</p> <p>6 image in the Valadez, same image, and you can</p> <p>7 see you have these edges, the same types of</p> <p>8 edges on these -- on many of the rounded</p> <p>9 structures that are talc plates, right?</p> <p>10 MS. O'DELL: Objection to the</p> <p>11 form.</p> <p>12 MR. LUDWIG: Same objection.</p> <p>13 I instruct him not to answer.</p> <p>14 Once again, on-the-fly analysis of talc</p> <p>15 plates.</p> <p>16 MR. DUBIN: You're instructing</p> <p>17 him not to answer?</p> <p>18 MR. LUDWIG: Correct.</p> <p>19 BY MR. DUBIN:</p> <p>20 Q. Okay. And, again, I want to</p> <p>21 understand your experience, your personal</p> <p>22 experience with these types of edge effects,</p> <p>23 and I just want to ask you about an image,</p> <p>24 whether it's something that you have seen</p> <p>25 before.</p>
<p style="text-align: right;">Page 135</p> <p>1 BY MR. DUBIN:</p> <p>2 Q. Do you know that the refractive</p> <p>3 index that you have assigned to this particle</p> <p>4 corresponds to the colors magenta and purple?</p> <p>5 Are you aware of that?</p> <p>6 A. I do see --</p> <p>7 MR. PLACITELLA: I have the</p> <p>8 same objection I had before. This is even</p> <p>9 less clear than the last one.</p> <p>10 BY MR. DUBIN:</p> <p>11 Q. Okay. Are you aware that the</p> <p>12 refractive index numbers you assigned to this</p> <p>13 particle are -- correspond to magenta and</p> <p>14 purple?</p> <p>15 MS. O'DELL: Object to the</p> <p>16 form.</p> <p>17 He has already testified he</p> <p>18 would need the charts and other information.</p> <p>19 BY MR. DUBIN:</p> <p>20 Q. Well, just -- do you know that? Are</p> <p>21 you aware that that's the color you said this</p> <p>22 particle was?</p> <p>23 A. I am.</p> <p>24 Q. Okay.</p> <p>25 A. But not the particle.</p>	<p style="text-align: right;">Page 137</p> <p>1 MR. DUBIN: And we'll mark that</p> <p>2 as exhibit 20. It will be CX-56.</p> <p>3 (Exhibit 20 marked for</p> <p>4 identification.)</p> <p>5 BY MR. DUBIN:</p> <p>6 Q. So Cargille glass, Cargille glass</p> <p>7 has a single refractive index, right?</p> <p>8 MS. O'DELL: Objection to the</p> <p>9 form.</p> <p>10 What's being shown on the</p> <p>11 screen?</p> <p>12 MR. DUBIN: These are images of</p> <p>13 Cargille glass in dispersion staining. I am</p> <p>14 asking him about his experience and his</p> <p>15 background, experience, and training.</p> <p>16 MS. O'DELL: He is not here as</p> <p>17 an expert witness and --</p> <p>18 MR. LUDWIG: Right. So --</p> <p>19 MS. O'DELL: -- this is beyond</p> <p>20 the scope. Excuse me. Counsel, go ahead.</p> <p>21 MR. LUDWIG: I'm sorry. So I</p> <p>22 am instructing the witness not to answer.</p> <p>23 Exactly.</p> <p>24 BY MR. DUBIN:</p> <p>25 Q. And I am going to keep asking you</p>

<p style="text-align: right;">Page 138</p> <p>1 some questions about this and if your attorney 2 wants to object and say for you not to answer 3 to each of them, that's fine. We'll do that. 4 Can you see -- are you familiar 5 with this phenomena that even if you look at a 6 particle with a single refractive index, 7 right, for example, blue here, you can see 8 sometimes these edge effects such as the red 9 or the purple that we're seeing in this image? 10 Are you familiar with the fact 11 that that happens? 12 MS. O'DELL: Objection; beyond 13 the scope of the deposition; beyond the scope 14 of this witness' testimony; assumes facts not 15 in evidence. 16 BY MR. DUBIN: 17 Q. Do you know how to determine -- 18 sorry. 19 MR. DUBIN: Is there 20 instruction not to answer that? 21 MR. LUDWIG: There is 22 instruction not to answer that, yes. 23 BY MR. DUBIN: 24 Q. Do you know how to determine in 25 these kind of circumstances what the true CSDS</p>	<p style="text-align: right;">Page 140</p> <p>1 MS. O'DELL: Join. 2 BY MR. DUBIN: 3 Q. However, you, when you're looking at 4 the yellow particles in your analysis, you 5 take these edge effects and you base your 6 calculations on them, correct? 7 MR. LUDWIG: Same objection; 8 same instruction. 9 MS. O'DELL: Misstates the 10 record and misleading and argumentative. 11 MR. DUBIN: All right. 12 BY MR. DUBIN: 13 Q. Do you have experience working with 14 and analyzing Cargille glass? 15 A. Not analyzing, but utilizing it -- 16 Q. Have you -- 17 A. -- I do recall. 18 Q. Have you ever observed these types 19 of phenomena when looking at Cargille glass? 20 A. I have not. 21 Q. Okay. What is a -- do you know how 22 to perform a Becke line analysis? 23 MS. O'DELL: Beyond the scope 24 of the reports in this case and seeks expert 25 opinion.</p>
<p style="text-align: right;">Page 139</p> <p>1 color is? Do you know how to do that? 2 MR. LUDWIG: Same objection. 3 MR. DUBIN: Are you instructing 4 your witness not -- 5 MR. LUDWIG: I am. 6 MR. DUBIN: -- to answer? 7 MS. O'DELL: Join. 8 MR. DUBIN: Okay. 9 BY MR. DUBIN: 10 Q. Are you familiar with why you can 11 get these types of red edges around certain 12 particles that do not reflect the true central 13 stop dispersion staining color of the 14 particle? Do you know anything about that? 15 MR. LUDWIG: Same objection; 16 same instruction. 17 MR. DUBIN: Okay. 18 MS. O'DELL: Join. 19 BY MR. DUBIN: 20 Q. If you were to base your calculation 21 of the refractive index of this piece of 22 Cargille glass on the red edge here, you would 23 be getting the wrong result, correct? 24 MR. LUDWIG: Same objection; 25 same instruction.</p>	<p style="text-align: right;">Page 141</p> <p>1 MR. DUBIN: Are you -- 2 MR. LUDWIG: Join. 3 MR. DUBIN: -- instructing him 4 not to answer? 5 MR. LUDWIG: Not to answer. 6 BY MR. DUBIN: 7 Q. Do you know how to use a Becke line 8 analysis to determine in a situation such as 9 we're looking at here what the correct CSDS 10 color is? 11 MR. LUDWIG: Same objection; 12 same instruction. 13 MS. O'DELL: Join. 14 BY MR. DUBIN: 15 Q. Have you performed any Becke line 16 analysis with respect to any of the particles 17 that you're claiming are chrysotile in Johnson 18 & Johnson? 19 A. I have not. 20 Q. Okay. 21 MR. PLACITELLA: Morty, you 22 look really hungry. 23 MR. DUBIN: All right. We can 24 take lunch now. How long do you guys want? 25 We can go off the record.</p>

<p style="text-align: right;">Page 142</p> <p>1 VIDEOGRAPHER: The time is 2 12:38 p.m. We're off the record. 3 (Break held off the record.) 4 VIDEOGRAPHER: The time is 5 1:28 p.m. We are back on the record. 6 BY MR. DUBIN: 7 Q. All right. Well, we'll see. If 8 there is an objection to this as well and this 9 topic, then we'll move on from it, but I need 10 to ask it to make sure. 11 So I put together a slide and I 12 put together some excerpts from the Valadez 13 report just so they are all in one spot for 14 the backup of this slide. 15 We'll mark the backup, which is 16 CX-12, as the next exhibit in order. I guess 17 that's 20? 18 THE COURT REPORTER: If you 19 would like me to check, give me one moment. 20 MR. DUBIN: Sure. Thanks. 21 MR. KEESTER: I believe that's 22 21. 23 MR. DUBIN: Twenty-one. 24 THE COURT REPORTER: I will 25 take counsel's assertion it's 21 without</p>	<p style="text-align: right;">Page 144</p> <p>1 BY MR. DUBIN: 2 Q. Okay. But it is true, Mr. Hess, 3 that when you're calling particles chrysotile 4 in Johnson & Johnson, you're basing that not 5 on the color of the particle that you're 6 seeing, but on the color of the edge effects 7 that you're seeing, right? 8 A. Focused at the edge, this -- the way 9 everything I do is set up initially with the 10 alignment and centering of all the objectives 11 and lenses with the scope, with the 12 illumination lamp full, field diaphragm open, 13 and I scan for a suspicious object. 14 When I focus in on what appears 15 to be suspicious, I first make sure that I can 16 see signs of fibrousity. Then I go back to 17 dispersion staining and I will utilize what's 18 in Dr. Su's paper, looking at the edge, as 19 stated on page 3 and page 5, utilizing what's 20 on page 5, which specifically shows or 21 indicates to me looking at the edge -- 22 Q. Page 5 of what? 23 A. -- specifically says: At particle 24 edge. 25 Q. Page 3 and page 5 of what?</p>
<p style="text-align: right;">Page 143</p> <p>1 checking. 2 MR. DUBIN: Okay. It's 21 3 then. All right. So we'll make that 21 and 4 can you just put it in chat, Jake? 5 MR. KEESTER: Already done. 6 MR. DUBIN: And then the slide 7 which will be 22 and that's slide 48. 8 (Exhibits 21 and 22 marked for 9 identification.) 10 BY MR. DUBIN: 11 Q. I tried to ask you this already, 12 Mr. Hess, but the same type of edge effects 13 that you're relying on to call particles 14 chrysotile in Johnson & Johnson are also 15 present on talc plates in your analysis; is 16 that true? 17 MS. O'DELL: Objection. This 18 is beyond the scope of the deposition and 19 Mr. Hess' testimony. 20 Further, the way that these 21 particles are depicted from who knows what is 22 misleading and not representative of what was 23 actually in the reports. 24 MR. LUDWIG: I will join and 25 instruct the witness not to answer.</p>	<p style="text-align: right;">Page 145</p> <p>1 MS. O'DELL: He is not 2 finished, Morty. 3 BY MR. DUBIN: 4 Q. Sorry. 5 A. And then I -- best I can or I will 6 do everything I can to make sure that what I 7 am seeing is best represented in the 8 photograph that I take and I am not seeing the 9 things on the screen, I use the scope. 10 Q. So are you telling me that in order 11 to understand your work and the calls that 12 you're making, that I -- someone needs to be 13 actually looking through your microscope? 14 MR. LUDWIG: Objection. 15 MS. O'DELL: Objection. 16 BY MR. DUBIN: 17 Q. You can respond. 18 A. No, sir. I am sure there is plenty 19 of the sample available where someone at your 20 client's place can do the same thing. 21 Q. Well, just to understand what the 22 call is that you're making on a particular 23 particle, do I need to be looking through your 24 scope? 25 A. It's documented in the photographs</p>

<p style="text-align: right;">Page 146</p> <p>1 and the reports that are submitted. 2 Q. So if we don't see something in the 3 photograph that you're claiming is there, then 4 it wasn't really there? 5 MS. O'DELL: Objection. 6 MR. LUDWIG: Objection. 7 MS. O'DELL: Argumentative. 8 MR. LUDWIG: Objection to form; 9 argumentative. 10 BY MR. DUBIN: 11 Q. You can respond. 12 A. It doesn't mean that it wasn't 13 there. I use the scope, not the screen. 14 Q. Okay. You mentioned illumination. 15 So I just want to talk about that again for a 16 second. We can go back to the Valadez report. 17 We can go to -- let's go to the first image, 18 the No. 1. I think it's thirty- -- okay. 19 Is it your testimony that the 20 Leica microscope that you're using can't take 21 images that are any brighter than this? 22 A. I believe I have already answered 23 that question. 24 Q. I'm asking about this specific 25 image.</p>	<p style="text-align: right;">Page 148</p> <p>1 seeing here in image 62? 2 MS. O'DELL: Let me just -- 3 what is being displayed on the screen? 4 MR. DUBIN: I am just using it 5 for demonstrative purposes right now and I am 6 asking him a question about his microscope. 7 BY MR. DUBIN: 8 Q. Is it able to take images that are 9 as bright as the one that we see on the 10 screen? 11 MS. O'DELL: Object to the -- 12 object to the question; calls for expert 13 testimony. It's beyond the scope of what he 14 did for purposes of these reports. 15 MR. LUDWIG: I want to add that 16 these images call for speculation. I mean, he 17 is being asked to analyze an image on 18 PowerPoint on an unknown -- an unknown source. 19 I think this, once again, calls 20 for expert testimony to make that comparison. 21 So I am going to instruct him not to answer 22 the question. 23 MR. DUBIN: I am asking him 24 about his microscope, his illumination 25 settings, what he sees under the microscope,</p>
<p style="text-align: right;">Page 147</p> <p>1 Do you have an answer, sir? 2 A. In reference to this image, as I 3 recall the previous image was something a 4 little different. So I would have to say, 5 yes. 6 Q. I'm sorry. I don't understand. 7 So to make sure the question is 8 clear, is it your testimony that the Leica 9 microscope cannot take any brighter image than 10 what we see here? 11 MS. O'DELL: Objection to the 12 form; asked and answered. 13 THE WITNESS: I cannot answer 14 as to the actual scope itself, but in my 15 experience with it, this is the brightest I 16 can get it. 17 MR. DUBIN: I just want to show 18 you -- we'll mark it as the next exhibit in 19 order. I guess it's -- now we're on 23, 20 CX-62. 21 (Exhibit 23 marked for 22 identification.) 23 BY MR. DUBIN: 24 Q. Is your Leica microscope able to 25 take images that are as bright as what we're</p>	<p style="text-align: right;">Page 149</p> <p>1 and I'm asking him whether his microscope that 2 he knows and he works with is capable of 3 producing an image at this illumination level 4 and my question stands. 5 BY MR. DUBIN: 6 Q. Can you answer that for me, 7 Mr. Hess? 8 MR. LUDWIG: And I am making 9 the same objection I made and I am 10 incorporating the same response and 11 instructing him not to answer. 12 You're asking for a comparison. 13 BY MR. DUBIN: 14 Q. Okay. I will tell you what this is, 15 Mr. Hess. This was an image that was taken by 16 Dr. Su on the same type of microscope that 17 you're using. 18 Are you testifying that your 19 microscope cannot take images at this level of 20 illumination? 21 MS. O'DELL: Objection; calls 22 for expert testimony, it's beyond the scope of 23 this deposition, and he has testified already 24 to the level of illumination that he has used 25 in the photomicrographs for these reports.</p>

<p style="text-align: right;">Page 150</p> <p>1 MR. LUDWIG: Once again, I am 2 going to incorporate my previous objections 3 and instruct him not to answer. Dr. Su -- 4 MR. DUBIN: If you're going to 5 instruct him not to -- if you're going to 6 instruct him not to answer, we don't have 7 to -- 8 MR. LUDWIG: I instruct him not 9 to answer then. 10 MR. DUBIN: And that's fine. 11 Because we will be arguing about this at some 12 point. 13 BY MR. DUBIN: 14 Q. But let me ask you again, Mr. Hess, 15 are you testifying under oath that the images 16 that you have for, for example, in the Valadez 17 report we have looked at are taken at as high 18 an illumination setting as the microscope 19 goes? Are you testifying to that? 20 MS. O'DELL: Asked and 21 answered. 22 THE WITNESS: Yes. 23 BY MR. DUBIN: 24 Q. What is the correct formula for 25 determining birefringence?</p>	<p style="text-align: right;">Page 152</p> <p>1 dispersion staining colors for chrysotile in 2 1.550 in parallel and perpendicular? 3 A. In parallel, generally, if you can 4 get a single fiber, which is what I understand 5 that gives you the best, but, unfortunately, 6 in chrysotile, they are too small. So they 7 deal with bundles. 8 But, generally, you're looking 9 in the blue, magenta range; and in gamma, 10 based on the Canadian chrysotile, as I 11 understand it, and perpendicular, which is the 12 alpha, would be in the lighter blue range. 13 Q. Okay. And what is your 14 understanding of the CSDS colors associated 15 with Calidria in 1.550? 16 A. I am not familiar with that 17 particular table. 18 Q. Okay. So you don't have a view of 19 what colors Calidria asbestos demonstrates in 20 parallel or perpendicular in 1.550? 21 A. From my experience. 22 Q. Okay. So what is it? 23 A. Well, it ranges between the 24 Calidria -- excuse me -- between the Canadian 25 chrysotile standard and a yellow gold color</p>
<p style="text-align: right;">Page 151</p> <p>1 A. I keep a manual handy for 2 mathematics. 3 Q. What manual? 4 A. I have the McCrone manual and other 5 manuals within the laboratory covering what 6 McCrone covers in his coursebook. 7 Q. Do you recall the name of the 8 manual? 9 A. No, I do not recall. 10 Q. Okay. Do you recall anything about 11 it other than it's a manual? When it's from? 12 Who the author is? Anything? 13 A. The author is McCrone. 14 Q. Okay. Do you recall what the 15 formula is, how you -- what numbers do you 16 use? What -- how do you calculate? 17 A. I don't recall. That's why we keep 18 reference materials. 19 Q. Are you the one who does the 20 birefringence calculations for these reports? 21 A. No. 22 Q. Who does them? 23 A. I believe it's part of what 24 Dr. Longo puts together. 25 Q. Okay. What are the correct central</p>	<p style="text-align: right;">Page 153</p> <p>1 gamma. 2 Q. Okay. So you're saying in parallel 3 it's -- you're claiming that Calidria will be 4 between a yellow gold and a magenta. 5 Is that what you're saying? 6 A. That's been my experience. 7 Q. Okay. Are you aware of any 8 scientific references that say that Calidria 9 in 1.550 will be yellow gold in parallel? 10 A. I am not aware of any. 11 Q. Can -- in your experience can talc 12 be yellow gold in parallel? 13 A. In my experience what I have seen 14 that ends up what I will call talc, that's 15 generally a very, very pale yellow at best to 16 white. 17 Q. So talc should be pale yellow to 18 white. 19 MR. DUBIN: Can we go back to 20 the Zimmerman image -- go back to the 21 Zimmerman report for a second. 22 BY MR. DUBIN: 23 Q. Looking again at the Zimmerman 24 image, we see some talc plates here. 25 Why isn't your talc pale yellow</p>

<p style="text-align: right;">Page 154</p> <p>1 to white in this image?</p> <p>2 MR. LUDWIG: (Inaudible.)</p> <p>3 THE COURT REPORTER: I couldn't</p> <p>4 hear you, sir. Please repeat.</p> <p>5 MR. LUDWIG: I said, Paul, if</p> <p>6 you need it zoomed in, please feel free to ask</p> <p>7 it.</p> <p>8 THE WITNESS: Well, one, my</p> <p>9 previous comment was based on fibrous talc,</p> <p>10 not talc flakes.</p> <p>11 BY MR. DUBIN:</p> <p>12 Q. And anything else?</p> <p>13 A. No.</p> <p>14 Q. Okay. The refractive index of</p> <p>15 elongated talc or a talc fiber in parallel is</p> <p>16 similar to the refractive index of the talc</p> <p>17 plate, correct?</p> <p>18 MS. O'DELL: Calls for an</p> <p>19 expert opinion; beyond the scope of this</p> <p>20 deposition. I --</p> <p>21 MR. LUDWIG: And I join and</p> <p>22 instruct him not to answer.</p> <p>23 MR. DUBIN: I am asking him</p> <p>24 about what he just testified about, the</p> <p>25 explanation that he just testified about, and</p>	<p style="text-align: right;">Page 156</p> <p>1 material.</p> <p>2 Q. First, who -- at some point were you</p> <p>3 examining Johnson & Johnson using 1.550 oil,</p> <p>4 but not reporting chrysotile?</p> <p>5 MS. O'DELL: I'm sorry. I</p> <p>6 missed the last part of that question. Would</p> <p>7 you mind repeating it?</p> <p>8 BY MR. DUBIN:</p> <p>9 Q. At some point in time were you</p> <p>10 analyzing Johnson & Johnson talc using 1.550,</p> <p>11 but not reporting chrysotile?</p> <p>12 MS. O'DELL: Object to the</p> <p>13 form.</p> <p>14 THE WITNESS: I don't recall.</p> <p>15 MR. DUBIN: Again, but for the</p> <p>16 Court's ruling, I would be asking now, along</p> <p>17 those lines -- and I will just accept the --</p> <p>18 make the objections. Because we're going to</p> <p>19 have to bring this up.</p> <p>20 BY MR. DUBIN:</p> <p>21 Q. You did a report -- you looked at</p> <p>22 about 70-something samples of Johnson &</p> <p>23 Johnson related talc using 1.550 oil and</p> <p>24 reported chrysotile in none of the samples at</p> <p>25 some point; isn't that right?</p>
<p style="text-align: right;">Page 155</p> <p>1 you're instructing him not to answer.</p> <p>2 Is that -- is that actually</p> <p>3 happening? Because -- are you instructing him</p> <p>4 not to answer that question?</p> <p>5 MR. LUDWIG: Yes.</p> <p>6 MR. DUBIN: Okay.</p> <p>7 BY MR. DUBIN:</p> <p>8 Q. The reason these are yellow and</p> <p>9 orange -- these are all orange and gold is</p> <p>10 because you have got a tungsten light shining</p> <p>11 on them, right?</p> <p>12 MS. O'DELL: Objection.</p> <p>13 MR. PLACITELLA: I object to</p> <p>14 your testimony, Morty.</p> <p>15 BY MR. DUBIN:</p> <p>16 Q. Is that correct?</p> <p>17 MS. O'DELL: Same objection;</p> <p>18 misstates the evidence.</p> <p>19 THE WITNESS: That is correct.</p> <p>20 BY MR. DUBIN:</p> <p>21 Q. So you're saying Calidria -- when</p> <p>22 did you first -- what is your view that</p> <p>23 Calidria asbestos in parallel can be yellow</p> <p>24 gold based on?</p> <p>25 A. Experience examining the Calidria</p>	<p style="text-align: right;">Page 157</p> <p>1 MS. O'DELL: That is -- that is</p> <p>2 direct --</p> <p>3 MR. DUBIN: Okay. I --</p> <p>4 MS. O'DELL: -- in --</p> <p>5 MR. DUBIN: -- that you're</p> <p>6 going to object to it. I just want the</p> <p>7 question on the record because we're going</p> <p>8 to -- I want to -- we're going to take this at</p> <p>9 issue.</p> <p>10 So I understand. You can</p> <p>11 object per the Court and instruct him not to</p> <p>12 answer.</p> <p>13 MR. LUDWIG: I instruct him not</p> <p>14 to answer.</p> <p>15 I do have a question for you,</p> <p>16 Mr. Dubin. Are you done with this image?</p> <p>17 Because the --</p> <p>18 MR. DUBIN: I will take it</p> <p>19 down; that's fine.</p> <p>20 MR. LUDWIG: I just don't know.</p> <p>21 Because I see Paul straining to watch you;</p> <p>22 that's why I asked.</p> <p>23 MR. DUBIN: Uh-huh.</p> <p>24 BY MR. DUBIN:</p> <p>25 Q. So at some point you decide to use</p>

<p style="text-align: right;">Page 158</p> <p>1 Calidria as a reference. 2 Whose idea was that at MAS? 3 A. As I recall, it was a collaborative 4 effort between Dr. Longo and myself. 5 Q. But who first suggested using 6 Calidria as a reference? 7 A. That I do not recall. 8 Q. Okay. When is the first time you 9 recall ever looking at Calidria by PLM 10 dispersion staining analysis? 11 A. I don't recall when that was either. 12 Q. But do you recall even generally? 13 Like, what -- was it within the last ten 14 years? Five years? Before that? 15 A. Within the last five. 16 Q. Did you ever participate in any 17 NVLAP proficiency testing related to Calidria? 18 A. No. 19 Q. So the whole reason why dispersion 20 staining can be used is because minerals have 21 defined refractive indices, right? 22 MR. LUDWIG: That calls for 23 expert testimony, objection. 24 I instruct you not to answer. 25 MS. O'DELL: Join.</p>	<p style="text-align: right;">Page 160</p> <p>1 BY MR. DUBIN: 2 Q. We saw in the Zimmerman image that 3 your talc could appear golden yellow, right? 4 MS. O'DELL: Object to the 5 form. 6 It's not his talc. It's 7 Johnson & Johnson talc. 8 BY MR. DUBIN: 9 Q. Your images of talc can appear 10 golden yellow, right? 11 A. Off the -- the Olympus BH2, yes. 12 Q. So if both -- if in your view both 13 Calidria and talc can show golden yellow in 14 parallel, how are you distinguishing between 15 them? 16 MS. O'DELL: Objection to the 17 form. 18 THE WITNESS: By whether I am 19 actually looking at fibrous talc or talc 20 plates. 21 BY MR. DUBIN: 22 Q. But your elongated talc -- now, 23 first of all, do you have any -- do you have 24 images -- what is your practice about imaging 25 when you do a review? Do you always take</p>
<p style="text-align: right;">Page 159</p> <p>1 BY MR. DUBIN: 2 Q. Why -- how is it that you can use 3 PLM to identify minerals by dispersion 4 staining? What property is it that allows you 5 to do that? 6 A. The refraction angle between 7 particle and oil creates a color that we can 8 use then to try to identify wavelength based 9 on temperature and the version of oil that's 10 been used. 11 Q. No question, if I look at Calidria 12 in 1.550, I can see generally magenta in 13 parallel and blue in perpendicular, right? 14 A. I have seen that in my experience. 15 Q. Okay. So how is it in your view 16 that somehow Calidria is also showing golden 17 yellow? What physical -- what property of 18 physics changes it so that sometimes when 19 you're finding it, it's to you golden yellow 20 as opposed to magenta? 21 MR. LUDWIG: Objection, same 22 objection. 23 I instruct you not to answer. 24 Calls for expert testimony. 25 MS. O'DELL: Join.</p>	<p style="text-align: right;">Page 161</p> <p>1 images? 2 A. If we find a structure of interest. 3 Q. Do you do that both when you're 4 looking for fibrous talc and when you're 5 looking for chrysotile? You take images? 6 A. If I find something that I feel 7 comfortable calling fibrous talc, yes. 8 Q. Do you have images -- we'll go back 9 and do that. 10 So my understanding is that 11 you're trying to say that even with the 12 tungsten light shining on the particles, talc 13 plates are going to be golden yellow, but what 14 you're calling fibrous talc is going to be 15 still bright yellow or pale yellow even -- 16 MS. O'DELL: Objection. 17 BY MR. DUBIN: 18 Q. -- is that what you're saying? 19 MS. O'DELL: I'm sorry. 20 Objection; misstates his testimony. 21 BY MR. DUBIN: 22 Q. I mean, wouldn't the fibrous talc 23 also have the same color as the talc in 24 parallel? 25 MS. O'DELL: Object to the</p>

41 (Pages 158 - 161)

<p style="text-align: right;">Page 162</p> <p>1 form.</p> <p>2 THE WITNESS: Not in my</p> <p>3 experience have I seen that.</p> <p>4 BY MR. DUBIN:</p> <p>5 Q. Are you familiar with any published</p> <p>6 reference values for the refractive indices of</p> <p>7 talc in parallel, in talc -- elongated fiber</p> <p>8 of talc in parallel?</p> <p>9 MS. O'DELL: Objection; calls</p> <p>10 for expert testimony; beyond the scope of the</p> <p>11 work he has done in this -- in these reports.</p> <p>12 MR. LUDWIG: I join and I</p> <p>13 instruct him not to answer.</p> <p>14 MR. DUBIN: Okay. And just one</p> <p>15 more time, for purposes of the record, all of</p> <p>16 this is going to his knowledge, experience,</p> <p>17 and training and how he has formulated the</p> <p>18 opinions that he has stated in these reports</p> <p>19 and I am being prevented from asking these</p> <p>20 questions. We're going to go to the Court</p> <p>21 about it, but I am going to keep going for a</p> <p>22 little while so that we make clear what you</p> <p>23 are objecting to or not.</p> <p>24 MS. O'DELL: There is a</p> <p>25 difference between asking about the work he</p>	<p style="text-align: right;">Page 164</p> <p>1 Q. Sure. Did you review -- as part of</p> <p>2 using Calidria as a standard for your</p> <p>3 analysis, did you review any MAS historical</p> <p>4 analysis of Calidria and its dispersion</p> <p>5 staining colors?</p> <p>6 A. I am not aware of anything like</p> <p>7 that, no.</p> <p>8 MR. DUBIN: Okay. Jake, I</p> <p>9 don't have the number, but let's just call up</p> <p>10 the historical MAS analysis as the next</p> <p>11 exhibit. It should be around 132 or 133 of</p> <p>12 the outline and it will be exhibit 24.</p> <p>13 (Exhibit 24 marked for</p> <p>14 identification.)</p> <p>15 BY MR. DUBIN:</p> <p>16 Q. Were you aware that MAS had recorded</p> <p>17 previously their refractive indices associated</p> <p>18 with Calidria asbestos?</p> <p>19 MS. O'DELL: I object to --</p> <p>20 first, object to the use of this exhibit.</p> <p>21 It's not been disclosed in the MDL, it's not</p> <p>22 something that this witness should be asked</p> <p>23 about, but I would -- I would encourage</p> <p>24 counsel to instruct him not to answer. This</p> <p>25 is beyond the scope.</p>
<p style="text-align: right;">Page 163</p> <p>1 has done for these particular reports and</p> <p>2 asking about methodology for things he hasn't</p> <p>3 done and goes into expert opinion and that's</p> <p>4 what we're basing our objections. It's</p> <p>5 clearly within the scope of Judge Schneider's</p> <p>6 order.</p> <p>7 MR. DUBIN: Okay. Well, we</p> <p>8 have done that. We'll do this at the end.</p> <p>9 BY MR. DUBIN:</p> <p>10 Q. You were never told at McCrone when</p> <p>11 you were doing your PLM training that somehow</p> <p>12 Calidria could not be identified by the</p> <p>13 standard colors associated with chrysotile;</p> <p>14 right? No one said that to you, correct?</p> <p>15 A. Nothing was mentioned about Calidria</p> <p>16 during the course.</p> <p>17 Q. Do you know whether Calidria is</p> <p>18 mentioned in ISO 22262?</p> <p>19 A. I am not aware of that.</p> <p>20 Q. Okay. Have you reviewed -- as part</p> <p>21 of familiarizing yourself with Calidria for</p> <p>22 purposes of using it as a standard, did you</p> <p>23 review any historical MAS analysis of Calidria</p> <p>24 by dispersion staining?</p> <p>25 A. Would you, please, rephrase that?</p>	<p style="text-align: right;">Page 165</p> <p>1 MR. LUDWIG: I was going to.</p> <p>2 This is totally beyond the scope of what the</p> <p>3 Judge said. So I am objecting to the question</p> <p>4 and I am instructing my client not to answer.</p> <p>5 BY MR. DUBIN:</p> <p>6 Q. Okay. So you don't know whether at</p> <p>7 MAS, before they tried to claim that there was</p> <p>8 chrysotile in Johnson & Johnson, they reported</p> <p>9 that Calidria would look magenta in parallel</p> <p>10 and blue in perpendicular.</p> <p>11 You're not aware of that?</p> <p>12 MS. O'DELL: Objection to the</p> <p>13 statements of counsel testifying, objection to</p> <p>14 the representations about this document we</p> <p>15 have never seen, and it is beyond the scope of</p> <p>16 this deposition.</p> <p>17 MR. DUBIN: Okay.</p> <p>18 MR. LUDWIG: I join the</p> <p>19 objection.</p> <p>20 BY MR. DUBIN:</p> <p>21 Q. You were using Calidria as your</p> <p>22 reference in the reports that we have been --</p> <p>23 that you have produced claiming to find</p> <p>24 chrysotile in Johnson & Johnson, correct?</p> <p>25 MS. O'DELL: Objection.</p>

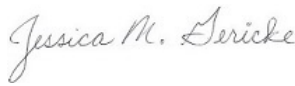
42 (Pages 162 - 165)

<p style="text-align: right;">Page 166</p> <p>1 MR. LUDWIG: Objection; 2 argumentative. 3 BY MR. DUBIN: 4 Q. Is that correct? 5 MS. O'DELL: Restate your 6 question. 7 BY MR. DUBIN: 8 Q. You were using Calidria asbestos as 9 the reference material for chrysotile with 10 respect to the reports that you have issued 11 claiming to find chrysotile in Johnson & 12 Johnson, correct? 13 MR. LUDWIG: Objection to the 14 form. 15 MS. O'DELL: Object to the 16 form. 17 THE WITNESS: We had not used 18 the Calidria to -- the only way we have used 19 the Calidria is to create standards in order 20 to calibrate for levels of concentration. 21 BY MR. DUBIN: 22 Q. I'm sorry. You're using it only to 23 calibrate levels of concentration. 24 What do you mean by that? 25 A. I mean by what might be visually</p>	<p style="text-align: right;">Page 168</p> <p>1 Johnson, are you reporting based on seeing the 2 actual particle being magenta in parallel? 3 A. I am reporting based on the colors I 4 see at the edge. 5 Q. Does the actual particle itself, 6 where you see the main color, is that ever 7 magenta itself? 8 MS. O'DELL: Would you repeat 9 the question, please? 10 BY MR. DUBIN: 11 Q. In the main center of the particle, 12 not these edge effects, do you recall ever 13 reporting it as the main color being magenta 14 itself, not the edge? 15 A. I have seen that, yes. 16 Q. Can you identify any report or any 17 image where you have seen the interior of 18 the -- what you're calling chrysotile in 19 Johnson & Johnson being magenta, any image, 20 any report? 21 A. I do not recall. 22 Q. I want to ask you a little bit about 23 your reference images of Calidria in 1.560 24 and -- 25 MR. PLACITELLA: Could you</p>
<p style="text-align: right;">Page 167</p> <p>1 apparent within a set of standards. 2 Q. But you would agree that what you're 3 identifying as chrysotile in Johnson & Johnson 4 does not look like standard reference 5 chrysotile, correct? 6 It does not have the magenta in 7 parallel and blue in perpendicular associated 8 with standard reference Chrysotile, correct? 9 MS. O'DELL: Objection; 10 misstates the record; calls for expert 11 opinion. 12 MR. LUDWIG: Join. I instruct 13 the witness not to answer. 14 MR. DUBIN: So you're 15 instructing him not to answer about the colors 16 that he is seeing in the analysis that this 17 whole deposition is about? Is that my -- is 18 that right? 19 MS. O'DELL: That's not 20 correct. 21 MR. LUDWIG: I am instructing 22 him not to answer the question as asked. 23 BY MR. DUBIN: 24 Q. What -- are you reporting -- when 25 you're reporting chrysotile in Johnson &</p>	<p style="text-align: right;">Page 169</p> <p>1 just, please, define your reference images, 2 please? Thank you. 3 MR. DUBIN: The reference 4 images that he created on the PLM that are 5 part of Dr. Longo's reports. 6 MR. PLACITELLA: Thank you. 7 MS. O'DELL: Which reports? 8 MR. DUBIN: I am about to mark 9 it, but I got interrupted. All right. So -- 10 MR. PLACITELLA: I wasn't 11 objecting. I was just asking. 12 MR. DUBIN: So we'll mark 13 CX-00029 or CX-29 as the next exhibit. I 14 guess we're at 25. 15 (Exhibit 25 marked for 16 identification.) 17 MR. DUBIN: If we can turn that 18 a little bit? 19 MS. O'DELL: And what report 20 did this image come from? 21 MR. DUBIN: Let's show the 22 front of the report, too, if we have it. It's 23 from the (inaudible). 24 MR. KEESTER: Morty, I don't 25 have the first page of this report. I can go</p>

<p style="text-align: right;">Page 170</p> <p>1 find it if need be.</p> <p>2 MR. DUBIN: Okay. Well, let's</p> <p>3 make sure that we mark it as an exhibit so</p> <p>4 they have the entire report. The full report</p> <p>5 will be 26.</p> <p>6 MS. O'DELL: I want to make</p> <p>7 sure that this report is at issue in the MDL.</p> <p>8 Can you represent to me which report this</p> <p>9 image came from?</p> <p>10 MR. DUBIN: These are all of</p> <p>11 the reference images that Dr. Longo provides</p> <p>12 along with all of these reports as his</p> <p>13 references for his chrysotile findings. These</p> <p>14 are all part of his analysis in -- it's all</p> <p>15 part of the chrysotile analysis that is being</p> <p>16 discussed in these -- in this deposition.</p> <p>17 MS. O'DELL: With due respect,</p> <p>18 Morty, that doesn't mean anything. I mean,</p> <p>19 the question is, is -- is this --</p> <p>20 MR. DUBIN: Dr. Longo is</p> <p>21 relying on these reference images for his</p> <p>22 identification of chrysotile in the reports</p> <p>23 that we are discussing today.</p> <p>24 MS. O'DELL: And I am asking</p> <p>25 you what report does this image come from?</p>	<p style="text-align: right;">Page 172</p> <p>1 Calidria to say there is chrysotile in Johnson</p> <p>2 & Johnson as part of this analysis are somehow</p> <p>3 off limits, but if you're going to take that</p> <p>4 position, you're going to take that position.</p> <p>5 MS. O'DELL: I'm not --</p> <p>6 MR. DUBIN: We'll take --</p> <p>7 MS. O'DELL: -- the position I</p> <p>8 am taking is that you have an image on the</p> <p>9 screen. We have --</p> <p>10 MR. DUBIN: Okay.</p> <p>11 MS. O'DELL: -- no idea where</p> <p>12 it came from --</p> <p>13 MR. DUBIN: (Inaudible.)</p> <p>14 MS. O'DELL: (Inaudible.)</p> <p>15 THE COURT REPORTER: I'm sorry.</p> <p>16 This is the court reporter. Everyone is</p> <p>17 talking at once and I can't hear anything.</p> <p>18 Apologies.</p> <p>19 MS. O'DELL: Jessica, I'm</p> <p>20 sorry. I mean, I am just trying to finish my</p> <p>21 objection.</p> <p>22 We have no idea where this</p> <p>23 image came from. I am just asking -- you're</p> <p>24 saying it's a reference image from Dr. Longo.</p> <p>25 I have no idea of the context and we --</p>
<p style="text-align: right;">Page 171</p> <p>1 That's what I am asking you.</p> <p>2 MR. DUBIN: I will tell you the</p> <p>3 name of the report, but it will be one of</p> <p>4 Dr. Longo's reference image reports that he</p> <p>5 supplies along with the chrysotile finding --</p> <p>6 alleged chrysotile findings from Johnson &</p> <p>7 Johnson.</p> <p>8 MS. O'DELL: Well --</p> <p>9 MR. DUBIN: (Inaudible.)</p> <p>10 MS. O'DELL: -- comes from</p> <p>11 without knowing if it's at issue in the MDL --</p> <p>12 MR. DUBIN: It is at issue in</p> <p>13 the MDL because they are his reference images</p> <p>14 that he is using to compare reference</p> <p>15 chrysotile to the reports that he has produced</p> <p>16 in the MDL. These are his reference images</p> <p>17 that are incorporated in all of his materials.</p> <p>18 MS. O'DELL: I don't --</p> <p>19 MR. DUBIN: Okay. We can take</p> <p>20 a ten-minute break. We'll get the whole</p> <p>21 report and then if you want to still instruct</p> <p>22 him not to answer, then we'll just add it to</p> <p>23 the pile of things, but I really can't see how</p> <p>24 any legitimate argument could be made that the</p> <p>25 reference images that they are relying on for</p>	<p style="text-align: right;">Page 173</p> <p>1 MR. DUBIN: (Inaudible.)</p> <p>2 MS. O'DELL: -- know that</p> <p>3 before the --</p> <p>4 MR. DUBIN: I am telling you</p> <p>5 what the context is now. Because apparently</p> <p>6 he produces them as individual images. He</p> <p>7 doesn't produce them as part of a report, but</p> <p>8 when he is requested to produce the reference</p> <p>9 images that he is relying on to use as a</p> <p>10 reference for chrysotile in 1.560, he just</p> <p>11 produces these images as the standards that he</p> <p>12 is relying on.</p> <p>13 So it's part of the materials</p> <p>14 that he relies on for these reports and his</p> <p>15 conclusions about the chrysotile -- alleged</p> <p>16 chrysotile in Johnson & Johnson.</p> <p>17 MR. PLACITELLA: I hear you --</p> <p>18 I hear you, Morty, but you're not deposing</p> <p>19 Dr. Longo here.</p> <p>20 MR. DUBIN: But these are</p> <p>21 images taken by Mr. Hess.</p> <p>22 MS. O'DELL: Well, and to my</p> <p>23 knowledge -- and I can be corrected on this,</p> <p>24 Morty, but this is not an image that's been</p> <p>25 produced in the MDL in relation to Dr. Longo's</p>

<p style="text-align: right;">Page 174</p> <p>1 testimony.</p> <p>2 MR. DUBIN: I am sure he has</p> <p>3 produced his reference images because he</p> <p>4 always produces his reference images because</p> <p>5 we always request his reference images.</p> <p>6 If you really are going to shut</p> <p>7 me down from asking a question about the</p> <p>8 reference images that were -- that are relied</p> <p>9 on for the reports in this case, then you're</p> <p>10 going -- you're going to do that. You're</p> <p>11 going to make the objection and we're going to</p> <p>12 go and argue about it and I think it is highly</p> <p>13 improper or you could let me ask him a</p> <p>14 question about an image that directly relates</p> <p>15 to his work and that he took.</p> <p>16 MS. O'DELL: Well, we don't</p> <p>17 have -- one, there is no evidence of that and</p> <p>18 second is Mr. Hess is here to testify on the</p> <p>19 reports that are produced in the MDL. Other</p> <p>20 things that Dr. Longo relies on are not at</p> <p>21 issue here for his opinions. So --</p> <p>22 MR. DUBIN: These are the --</p> <p>23 again, these are the images that Dr. Longo</p> <p>24 uses with his reports and the whole purpose of</p> <p>25 this is to ask the person who took the images</p>	<p style="text-align: right;">Page 176</p> <p>1 MR. LUDWIG: And I am going to</p> <p>2 join for the reasons stated and instruct the</p> <p>3 witness not to answer.</p> <p>4 MR. DUBIN: We're going to take</p> <p>5 a ten-minute break. I'll be back.</p> <p>6 VIDEOGRAPHER: The time is</p> <p>7 2:12 p.m. We are off the record.</p> <p>8 (Break held off the record.)</p> <p>9 VIDEOGRAPHER: The time is</p> <p>10 2:26 p.m. We are back on the record.</p> <p>11 MR. DUBIN: So for the record,</p> <p>12 I am going to mark as 26 Dr. Longo's</p> <p>13 deposition in a case called Kayme Clark and</p> <p>14 Dusty Clark v. Johnson & Johnson, where he</p> <p>15 identifies these reference images so that it's</p> <p>16 in the record. We'll put that in as 26. We</p> <p>17 don't have to do anything with it. We're just</p> <p>18 going to put it in the record.</p> <p>19 (Exhibit 26 marked for</p> <p>20 identification.)</p> <p>21 BY MR. DUBIN:</p> <p>22 Q. And then I am going to go back to</p> <p>23 the image and I am going to ask you some</p> <p>24 questions and if you're instructed not to</p> <p>25 answer, you are instructed not to answer.</p>
<p style="text-align: right;">Page 175</p> <p>1 about them.</p> <p>2 I am not going to continue to</p> <p>3 argue with you. If you're going to instruct</p> <p>4 the witness not to answer, go ahead and do it,</p> <p>5 because I think that this deposition has gone</p> <p>6 way off the rails and we're going to have to</p> <p>7 go to the Judge about it. So just do whatever</p> <p>8 you're going to do. I don't want to argue</p> <p>9 with you anymore.</p> <p>10 Are you claiming that you are</p> <p>11 going to stop this person, Mr. Hess, from</p> <p>12 talking about the reference images for the</p> <p>13 alleged chrysotile in Johnson & Johnson? If</p> <p>14 so, instruct him, and let's just have that</p> <p>15 done.</p> <p>16 MS. O'DELL: Judge Schneider</p> <p>17 was very clear as to what was fair game in</p> <p>18 this deposition and those are the reports</p> <p>19 produced in the MDL that involve the new</p> <p>20 method, to my knowledge. And you can correct</p> <p>21 me, but I don't think I am incorrect.</p> <p>22 This is not a part of those</p> <p>23 reports and it's not something that's an</p> <p>24 appropriate scope of this deposition and we</p> <p>25 would instruct the witness not to answer.</p>	<p style="text-align: right;">Page 177</p> <p>1 MR. DUBIN: So can we pull back</p> <p>2 up the Calidria reference image? And I don't</p> <p>3 think that was the page we were on; that was</p> <p>4 one of them.</p> <p>5 BY MR. DUBIN:</p> <p>6 Q. So is this an image that is -- are</p> <p>7 these your PLM images of Calidria 1.560?</p> <p>8 A. Yes.</p> <p>9 Q. Okay. And so all this blue stuff in</p> <p>10 the background, that's Calidria?</p> <p>11 A. That is correct.</p> <p>12 Q. Okay. And you're aware that</p> <p>13 Calidria can have impurities in it, too?</p> <p>14 MR. LUDWIG: That's -- I am</p> <p>15 going to object to the form and instruct him</p> <p>16 not to answer; that's beyond the scope.</p> <p>17 MR. DUBIN: Okay.</p> <p>18 BY MR. DUBIN:</p> <p>19 Q. Is this image taken at maximum</p> <p>20 illumination?</p> <p>21 A. It was.</p> <p>22 Q. All right. So images on that</p> <p>23 microscope don't get any brighter than this?</p> <p>24 MS. O'DELL: Objection; asked</p> <p>25 and answered.</p>

45 (Pages 174 - 177)

<p style="text-align: right;">Page 178</p> <p>1 MR. LUDWIG: Join.</p> <p>2 MR. DUBIN: All right. Let's</p> <p>3 make the next exhibit in order, which is 27,</p> <p>4 we'll make it slide 61 -- sorry -- actually,</p> <p>5 slide 95.</p> <p>6 (Exhibit 27 marked for</p> <p>7 identification.)</p> <p>8 MS. O'DELL: I'm sorry. Is</p> <p>9 this exhibit 27?</p> <p>10 MR. DUBIN: Twenty-seven.</p> <p>11 MR. LUDWIG: (Inaudible.)</p> <p>12 THE COURT REPORTER: If you</p> <p>13 just said something, Mr. Hess, I couldn't hear</p> <p>14 you.</p> <p>15 MR. LUDWIG: That was me</p> <p>16 talking to myself. I apologize, Jessica. I</p> <p>17 am simply saying that my exhibit list is</p> <p>18 mis-numbered for some reason.</p> <p>19 BY MR. DUBIN:</p> <p>20 Q. Are you claiming those two -- those</p> <p>21 two images have the same dispersion staining</p> <p>22 colors?</p> <p>23 MR. LUDWIG: I am going to</p> <p>24 object to the form of the question.</p> <p>25 MS. O'DELL: I object to the</p>	<p style="text-align: right;">Page 180</p> <p>1 objections as made have been proper and</p> <p>2 absolutely consistent with Judge Schneider's</p> <p>3 prior ruling and I will object to any further</p> <p>4 deposition of Mr. Hess.</p> <p>5 MR. DUBIN: Okay. We'll have</p> <p>6 to resolve that. All right. Thanks for</p> <p>7 today. Take care.</p> <p>8 VIDEOGRAPHER: The time is</p> <p>9 2:31 p.m. We're off the record.</p> <p>10 (Witness was excused.)</p> <p>11 (Deposition concluded at</p> <p>12 2:31 p.m.)</p> <p>13</p> <p>14</p> <p>15</p> <p>16</p> <p>17</p> <p>18</p> <p>19</p> <p>20</p> <p>21</p> <p>22</p> <p>23</p> <p>24</p> <p>25</p>
<p style="text-align: right;">Page 179</p> <p>1 question.</p> <p>2 MR. LUDWIG: Yeah.</p> <p>3 MS. O'DELL: This is --</p> <p>4 MR. DUBIN: Are you instructing</p> <p>5 him not to answer?</p> <p>6 MS. O'DELL: Yes. This is</p> <p>7 beyond the scope.</p> <p>8 BY MR. DUBIN:</p> <p>9 Q. Have you ever received any criticism</p> <p>10 from NVLAP about your PLM work?</p> <p>11 A. None that I am aware of.</p> <p>12 MR. DUBIN: Okay. At this</p> <p>13 point, you know, I think we're going to have</p> <p>14 to go to the Court. I am going to shut the</p> <p>15 deposition down for the day, but I am not</p> <p>16 agreeing to end it. I think that the</p> <p>17 restrictions that have been placed on me by</p> <p>18 counsels' objections and instructions not to</p> <p>19 answer are improper and we're going to seek</p> <p>20 relief with the Court.</p> <p>21 So I am suspending it for the</p> <p>22 day because I think I am handcuffed, but I</p> <p>23 understand you guys have different opinions.</p> <p>24 So we'll just have to deal with it later.</p> <p>25 MS. O'DELL: Our view is the</p>	<p style="text-align: right;">Page 181</p> <p>1 C E R T I F I C A T E</p> <p>2 I HEREBY CERTIFY that prior to the</p> <p>3 commencement of the examination, PAUL HESS,</p> <p>4 was remotely sworn by me to testify to the</p> <p>5 truth and that the proceedings, evidence, and</p> <p>6 objections are contained fully and accurately</p> <p>7 in the stenographic notes taken by me upon the</p> <p>8 deposition taken on July 10, 2024, and this is</p> <p>9 a true and correct transcript of same.</p> <p>10</p> <p>11</p> <p>12 </p> <p>13</p> <p>14 Jessica M. Gericke, RPR, CCR-NJ,</p> <p>and Notary Public</p> <p>15</p> <p>16</p> <p>17 (The foregoing certification of this</p> <p>18 transcript does not apply to any reproduction</p> <p>19 of the same by any means, unless under the</p> <p>20 direct control and/or supervision of the</p> <p>21 certifying reporter.)</p> <p>22</p> <p>23</p> <p>24</p> <p>25</p>

<p style="text-align: right;">Page 182</p> <p>1 I have read the foregoing transcript 2 of my deposition given on July 10, 2024, and 3 it is true, correct and complete, to the best 4 of my knowledge, recollection and belief, 5 except for the corrections noted hereon and/or 6 list of corrections, if any, attached on a 7 separate sheet herewith. 8 9 _____ Paul Hess 10 11 12 13 14 Subscribed and sworn to 15 before me this ____ day 16 of _____, 20__ 17 18 19 _____ 20 Notary Public 21 22 23 24 25</p>	
<p style="text-align: right;">Page 183</p> <p>1 ERRATA SHEET 2 3 PAGE LINE CHANGES OR CORRECTION AND REASON 4 _____ 5 _____ 6 _____ 7 _____ 8 _____ 9 _____ 10 _____ 11 _____ 12 _____ 13 _____ 14 _____ 15 _____ 16 _____ 17 _____ 18 _____ 19 20 I have inspected and read my deposition as captioned above and have listed all changes 21 and corrections above, along with my reasons therefor. 22 23 DATE: _____ 24 Signature of Deponent: _____ 25</p>	

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Federal Rules of Civil Procedure

Rule 30

(e) Review By the Witness; Changes.

(1) Review; Statement of Changes. On request by the deponent or a party before the deposition is completed, the deponent must be allowed 30 days after being notified by the officer that the transcript or recording is available in which:

(A) to review the transcript or recording; and

(B) if there are changes in form or substance, to sign a statement listing the changes and the reasons for making them.

(2) Changes Indicated in the Officer's Certificate. The officer must note in the certificate prescribed by Rule 30(f)(1) whether a review was requested and, if so, must attach any changes the deponent makes during the 30-day period.

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Exhibit 34



Tabulation of Asbestos-Related Terminology

By Heather Lowers and Greg Meeker

Open-File Report 02-458

2002

This report is preliminary and has not been reviewed for conformity with U.S. Geological Survey editorial standards. Any use of trade, product, or firm names is for descriptive purposes only and does not imply endorsement by the U.S. Government.

**U.S. DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY**

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Abstract

The term asbestos has been defined in numerous publications including many State and Federal regulations. The definition of asbestos often varies depending on the source or publication in which it is used. Differences in definitions also exist for the asbestos-related terms acicular, asbestiform, cleavage, cleavage fragment, fiber, fibril, fibrous, and parting. An inexperienced reader of the asbestos literature would have difficulty understanding these differences and grasping many of the subtleties that exist in the literature and regulatory language. Disagreement among workers from the industrial, medical, mineralogical, and regulatory communities regarding these definitions has fueled debate as to their applicability to various morphological structures and chemical compositions that exist in the amphibole and serpentine groups of minerals. This debate has significant public health, economic and legal implications. This report summarizes asbestos-related definitions taken from a variety of academic, industrial, and regulatory sources. This summary is by no means complete but includes the majority of significant definitions currently applied in the discipline.

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Introduction

Ongoing debate in the asbestos community involves a variety of issues, many of which center around nomenclature. A novice to the asbestos literature would have difficulty grasping the significance and subtleties of the many terms used to describe various asbestos-related mineralogical structures. To confound the issue, many of these terms carry different definitions, depending upon the source that is consulted. The purpose of this report is to give the user a consolidated source of the various definitions that have been put forth and are being used. This report is not intended to endorse any particular definition, but rather point out the variations, differences and inconsistencies that exist in the literature.

The tables in this report present a compilation of definitions that have been put forth by mineralogical, industrial, regulatory, and medical workers over the last thirty years for the terms acicular, asbestiform, asbestos, cleavage, cleavage fragments, fiber, fibril, fibrous, and parting. Some definitions of these terms vary from source to source simply because they are intended for specific application in analytical methods. An example is the term *fiber* that may be defined simply by length and width criteria for the purpose of structure counting. Such a definition may not be applicable to a more general use of the term and should not be broadly applied. A person choosing to read an asbestos-related document should be aware of the intent of the definition in the particular publication.

The information in this report is presented in table format. The first column in each table, headed community, will contain one of five categories: interdisciplinary, industrial, medical, mineralogical, or regulatory (including test methods) based on the discipline of the publication in which the term appears. The second heading gives the year the source was published. This allows the reader to see the evolution, if any, of the terms over the years. The third column gives the complete reference for the source indicated. The fourth column includes the definition(s) for each asbestos-related term that is defined in the source. Each table is titled by the term being defined. In all cases, the

definitions of the terms were taken word for word from the source. Comments by the authors of this report are designated by italicized text enclosed by brackets. The same source was searched for all the terms given in this report. If a term was not defined, located, or used in the source, "NA" will appear in the respective column.

This tabulation is by no means complete, but includes the spectrum of definitions given in the academic, industrial, and regulatory literature. It is clear that there is disagreement and perhaps misunderstanding regarding some of the terminology used by workers in various asbestos-related fields. It is hoped that this report will assist the reader in evaluating and understanding the thousands of asbestos-related documents in the literature. For additional perspectives of the evolution of the terms defined in this report, the reader is referred to the following sources:

Langer, A.M., Rohl, A.N., Wolff, M., Selikoff, I.J., 1979, Asbestos, fibrous minerals and acicular cleavage fragments: Nomenclature and biological properties, *in* Lemen, R. and Dement, J.M., eds., Dust and disease: Park Forest South, Ill., Pathotox Publishers, p. 1-22.

Zoltai, Tibor, 1978, History of asbestos-related mineralogical terminology: National Bureau of Standards Special Publication 506, p. 1-18.

National Research Council, 1984, Asbestiform fibers-nonoccupational health risks: Washington D.C., National Academy Press, p. 25-47.

Table 1. Acicular

Community	Year	Source	Acicular
Industrial	1975	Winson, R.W., 1975, Asbestos, <i>in</i> , Industrial minerals and rocks (nonmetallics other than fuels): New York, N.Y., American Institute of Mining, Metallurgical, and Petroleum Engineers, Inc., p. 379-425.	NA
Industrial	1981	Steel, E. and Wylie, A., 1981, Mineralogical characteristics of asbestos <i>in</i> Riordon, P.H. ed, Geology of Asbestos Deposits, Society of Mining Engineers, p. 93-100.	NA
Industrial	1998	Virta, R.L., 2002, Asbestos: U.S. Geological Survey Open File-Report 02-149, 35 p.	NA
Interdisciplinary	1974	Thompson, C.S., 1974, Discussion of the mineralogy of industrial talcs: U.S. Bureau of Mines Information Circular 8639, p. 22-42.	NA
Interdisciplinary	1978	Zoltai, Tibor, 1978, History of asbestos-related mineralogical terminology: National Bureau of Standards Special Publication 506, p. 1-18.	NA
Interdisciplinary	1979	Chatfield, E.J., 1979, Measurement of asbestos fibres in the workplace and in the general environment <i>in</i> Ledoux, R.L., Mineralogical techniques of asbestos determination: Mineralogical Association of Canada Short Course, v. 4, p. 111-157.	NA
Interdisciplinary	1980	Dixon, W.C., 1980, Applications of optical microscopy in analysis of asbestos and quartz, <i>chap 2 of</i> Dollberg, D.D. and Werstuyft, A.W., eds., Analytical techniques in occupational health chemistry: Washington, D.C., American Chemical Society, p. 13-41.	NA
Interdisciplinary	1980	Clark, R.L., 1982, MSHA standard method for fiber identification by electron microscopy: National Bureau of Standards Special Publication 619, p. 207-210.	NA

Table 1. Acicular

Community	Year	Source	Acicular
Interdisciplinary	1980	Lee, R.J., Kelly, J.F., and Walker, J.S., 1982, Considerations in the analysis and definition of asbestos using electron microscopy: National Bureau of Standards Special Publication 619, p. 132-137.	NA
Interdisciplinary	1980	Chatfield, E.J. and Lewis, G.M., 1980, Development and application of an analytical technique for measurement of asbestos fibers in vermiculite: Scanning Electron Microscopy, p. 329-340.	NA
Interdisciplinary	1984	National Research Council, 1984, Asbestiform fibers-nonoccupational health risks: Washington D.C., National Academy Press, p. 25-47.	ACICULAR crystals are crystals that are extremely long and thin and have a small diameter. (An acicular crystal is a special type of PRISMATIC crystal. A prismatic crystal has one elongated dimension and two other dimensions that are approximately equal.) As defined by the American Geological Institute (1980), a mineral fragment must be at least three times as long as it is wide to be called acicular. Acicular crystals or fragments are not expected to have the strength, flexibility, or other properties of asbestiform fibers.
Interdisciplinary	1984	Cossette, M., 1984, Defining asbestos particulates for monitoring purposes <i>in</i> Levadie, B. ed., Definitions for asbestos and other health-related silicates: ASTM Special Technical Publication 834, p. 5-49.	needlelike
Interdisciplinary	1984	Ross, M., Kuntze, R.A., and Clifton, R.A., 1984, A definition for asbestos <i>in</i> Levadie, B. ed., Definitions for asbestos and other health-related silicates: ASTM Special Technical Publication 834, pp.139-147.	NA
Interdisciplinary	1988	Skinner, H.C., Ross, M., and Frondel, C., 1988, Asbestos and other fibrous materials: New York, N.Y., Oxford, 204 p.	Needle-shaped or needlelike. The term is ordinarily applied in mineralogy to straight, greatly elongate, free-standing (individual) crystals bounded laterally, and terminated, by crystal faces. Aggregates of acicular crystals often occur in open, bristly groups. The aspect ratio of acicular crystals is in the same range of those of "fiber" and "fibrous", but the thickness may extend to several millimeters.

Table 1. Acicular

Community	Year	Source	Acicular
Interdisciplinary	1990	Mossman, B.T., Bignon, J., Corn, M., Seaton, A., and Gee, J.B.L., 1990, Asbestos-scientific developments and implications for public policy: Science, v. 247, p. 294-301.	NA
Interdisciplinary	2000	The American Heritage® Dictionary of the English Language, Fourth Edition Copyright © 2000 by Houghton Mifflin Company.	Having the shape of a needle: <i>acicular crystals</i>
Interdisciplinary	2000	Wylie, A.G., 2000, The habit of asbestiform amphiboles: implications for the analysis of bulk samples <i>in</i> Beard, M.E. and Rooks, H.L, eds., Advances in environmental measurement methods for asbestos: ASTM Special Technical Publication 1342, p. 53-69.	NA
Interdisciplinary	2001	Beard, M.E., Crankshaw, O.S., Ennis, J.T., and Moore, C.E., 2001, Analysis of crayons for asbestos and other fibrous materials, and recommendations for improved analytical definitions: Research Triangle Park, North Carolina, Research Triangle Institute, Center for Environmental Measurements and Quality Assurance, Earth and Mineral Sciences Department, [informal report], 23 p., plus appendices A-H.	NA
Interdisciplinary	2001	Nolan, R.P., Langer, A.M., Ross, M., Wicks, F.J., and Martin, R.F., eds., 2001, The health effects of chrysotile asbestos-contribution of science to risk-management decisions: The Canadian Mineralogist Special Publication 5, 304 p.	NA
Medical	1977	Zielhuis, R.L., 1977, Public health risks of exposure to asbestos: Elmsford, N.Y., Pergamon Press Inc., 143 p.	NA

Table 1. Acicular

Community	Year	Source	Acicular
Medical	1979	Langer, A.M., Rohl, A.N., Wolff, M., and Selikoff, I.J., 1979, Asbestos, fibrous minerals and acicular cleavage fragments- Nomenclature and biological properties, <i>in</i> Lemen, R. and Dement, J.M., eds., Dust and disease: Park Forest South, Ill., Pathotox Publishers, p. 1-22.	NA
Medical	1998	Blake, T., Castranova, V., Schwegler-Berry, D., Baron, P., Deye, G.J., Li, C., and Jones, W., 1998, Effect of fiber length on glass microfiber cytotoxicity: Journal of Toxicology and Environmental Health, v. 54, p. 243-259.	NA
Medical	2001	Ninth Report on Carcinogens, January 2001 http://ehp.niehs.nih.gov/roc/ninth/known/asbestos.pdf	NA
Mineralogical	1914	Dana, E.S., 1914, The system of mineralogy of James Dwight Dana, descriptive mineralogy (6th ed): New York, N.Y., Wiley, p.	NA
Mineralogical	1977	Campbell, W.J., Blake, R.L, Brown, L.L., Cather, E.E., and Sjober, J.J., 1977, Selected silicate minerals and their asbestiform varieties: U.S. Bureau of Mines Information Circular 8751, 56 p.	The shape shown by an extremely slender crystal with small cross-sectional dimensions (a special case of prismatic form). Acicular crystals may be blunt-ended or pointed. The term "needlelike" refers to an acicular crystal with pointed termination at one or both ends.
Mineralogical	1979	Campbell, W.J., Steel, E.B., Virta, R.L., and Eisner, M.H., 1979, Relationship of mineral habit to size characteristics for tremolite cleavage fragments and fibers: U.S. Bureau of Mines Report of Investigations 8367, 18 p.	NA
Mineralogical	1980	Bates, R.L., and Jackson, J.A., eds., 1980, Glossary of geology (2d ed.): Falls Church, Va., American Geological Institute, 749 p.	[cryst] Said of a crystal that is needlelike in form. Cf: <i>fascicular</i> ; <i>sagenitic</i> .

Table 1. Acicular

Community	Year	Source	Acicular
Mineralogical	1982	MacKenzie, W.S., Donaldson, C.H., and Guilford, C., 1982, Atlas of igneous rocks and their textures: New York, N.Y., Wiley, p. 20.	syn. Needle-like fibre, fibrous, hair-like
Mineralogical	1987	Dorling, M. and Zussman, J., 1987, Characteristics of asbestiform and non-asbestiform calcic amphiboles: Lithos, v. 20, p. 469-489.	needle-like
Mineralogical	1988	Skinner, H.C., Ross, M., and Frondel, C., 1988, Asbestos and other fibrous materials: New York, N.Y., Oxford, 204 p.	NA
Mineralogical	1993	Klein, C. and Hurlbut, C.S., Jr., 1993, Manual of mineralogy (after James D. Dana) (21st ed.): New York, N.Y., Wiley, 681 p.	Slender, needlelike crystals.
Mineralogical	1993	Veblen, D.R. and Wylie, A.G., 1993, Mineralogy of amphiboles and 1:1 layer silicates in Guthrie Jr., G.D. and Mossman, B.T., eds., Health effects of mineral dusts: Reviews in Mineralogy, v. 28, p. 61-137,	NA
Mineralogical	2001	Virta, R.L., 2001, Some facts about asbestos: U.S. Geological Survey Fact Sheet FS-012-01, 4 p.	As the length increases relative to the width, the crystals are called acicular.
Mineralogical	2002	http://webmineral.com/help/Fracture.html	NA
Mineralogical	2002	http://webmineral.com/help/Habits.html	Occurs as needle-like crystals.
Regulatory	1974	U.S. District Court, district of Minnesota, 5th Division. Supplemental Memorandum. No. 5-72, Civil 19, Appendix 5, May 11, 1974, p. 24	NA
Regulatory	1976	National Institute for Occupational Safety and Health, 1976, Revised recommended asbestos standard: DHEW (NIOSH) Publication No. 77-169, 96 p.	NA
Regulatory	1983	29 CFR 1910.1001	NA
Regulatory	1990	Ohio Administrative Code (OAC) 3745-20-01	NA

Table 1. Acicular

Community	Year	Source	Acicular
Regulatory	1992	Crane, D., 1992, Polarized light microscopy of asbestos: Occupational Safety and Health Administration Method # ID-191.	NA
Regulatory	1992	Occupational Safety and Health Administration, 1992, Preambles IV. Mineralogical Considerations, National Stone Association and American Mining Congress	NA
Regulatory	1993	Perkins, R.L. and Harvey, B.W., 1993, Method for the determination of asbestos in bulk building materials: U.S. Environmental Protection Agency EPA/600/R-93/116, Office of Research and Development, Washington, D.C.	NA
Regulatory	1993	Occupational Safety and Health Administration, 1993, Better protection against asbestos in the workplace: U.S. Department of Labor Fact Sheet No. OSHA 93-06. Available on the world wide web at http://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=FACT_SHEETS&p_id=144	NA
Regulatory	1995	American Society for Testing and Materials, 1995, Standard test method for microvacuum sampling and indirect analysis of dust by transmission electron microscopy for asbestos structure number concentrations: West Conshohocken, Pa., ASTM 5755-95, 13 p.	NA
Regulatory	1995	International Organization for Standardization, 1995, ISO 10312 Ambient air-determination of asbestos fibres-direct-transfer transmission electron microscopy method (1st ed): Geneve, Switzerland, International Organization for Standardization, 51 p.	The shape of an extremely slender crystal with cross-sectional dimensions which are small relative to its length, i.e. needle-like.

Table 1. Acicular

Community	Year	Source	Acicular
Regulatory	1996	Colorado Air Quality Control Commission, 1996, Part B-emission standards for asbestos, <i>excerpted from</i> Regulation No. 8 "The control of hazardous air pollutants": Colorado Department of Public Health and Environment, 114 p.	NA
Regulatory	1997	Crane, D., 1997, Asbestos in air: Occupational Safety and Health Administration Method # ID-160.	NA
Regulatory	1997	NYCRR (New York Code of Rules & Regulations) Title 10 Section 73.1	NA
Regulatory	2001	Environmental Protection Agency Part 763-Asbestos Subpart E--Asbestos-Containing Materials in Schools (7-1-01 Edition)	NA
Regulatory	2001	Environmental Protection Agency Part 763-Asbestos Subpart E--Asbestos-Containing Materials in Schools Appendix A (7-1-01 Edition)	NA
Regulatory	2001	29 CFR 1910.1001	NA
Regulatory	2001	30 CFR 56.5001	NA
Regulatory	2001	17 CCR (California Code of Regulations) 93105	NA
Regulatory	2001	West Virginia Code 16-32-2	NA
Regulatory	2002	OAR (Oregon Administrative Rules) 340-248-0010	NA
Regulatory	2002	105 ILCS (Illinois Compiled Statutes Schools) 105/3	NA

Table 2. Asbestiform

Community	Year	Source	Asbestiform
Industrial	1975	Winson, R.W., 1975, Asbestos, <i>in</i> , Industrial minerals and rocks (nonmetallics other than fuels): New York, N.Y., American Institute of Mining, Metallurgical, and Petroleum Engineers, Inc., p. 379-425.	NA
Industrial	1981	Steel, E. and Wylie, A., 1981, Mineralogical characteristics of asbestos <i>in</i> Riordon, P.H. ed, Geology of Asbestos Deposits, Society of Mining Engineers, p. 93-100.	The asbestiform habit is most commonly developed in certain amphiboles and chrysotile, but other minerals also may crystallize with this unusual habit. The habit may be characterized by (1) a fibril structure, single or twinned crystals of very small widths (generally less than 0.5 um), which have grown with a common fiber axis direction, but are disoriented in the other crystallographic directions; (2) anomalous optical properties, primarily parallel extinction; (3) unusual tensile strengths; (4) high aspect ratio; and (5) flexibility.
Industrial	1998	Virta, R.L., 2002, Asbestos: U.S. Geological Survey Open File-Report 02-149, 35 p.	NA
Interdisciplinary	1974	Thompson, C.S., 1974, Discussion of the mineralogy of industrial talcs: U.S. Bureau of Mines Information Circular 8639, p. 22-42.	NA
Interdisciplinary	1978	Zoltai, Tibor, 1978, History of asbestos-related mineralogical terminology: National Bureau of Standards Special Publication 506, p. 1-18.	A special type of fibrous habit in which the fibers are separable, and are more flexible and possess higher tensile strength than crystals in other habits of the same mineral.
Interdisciplinary	1979	Chatfield, E.J., 1979, Measurement of asbestos fibres in the workplace and in the general environment <i>in</i> Ledoux, R.L., Mineralogical techniques of asbestos determination: Mineralogical Association of Canada Short Course, v. 4, p. 111-157.	NA
Interdisciplinary	1980	Dixon, W.C., 1980, Applications of optical microscopy in analysis of asbestos and quartz, <i>chap 2 of</i> Dollberg, D.D. and Werstuyft, A.W., eds., Analytical techniques in occupational health chemistry: Washington, D.C., American Chemical Society, p. 13-41.	NA

Table 2. Asbestiform

Community	Year	Source	Asbestiform
Interdisciplinary	1980	Clark, R.L., 1982, MSHA standard method for fiber identification by electron microscopy: National Bureau of Standards Special Publication 619, p. 207-210.	NA
Interdisciplinary	1980	Lee, R.J., Kelly, J.F., and Walker, J.S., 1982, Considerations in the analysis and definition of asbestos using electron microscopy: National Bureau of Standards Special Publication 619, p. 132-137.	NA
Interdisciplinary	1980	Chatfield, E.J. and Lewis, G.M., 1980, Development and application of an analytical technique for measurement of asbestos fibers in vermiculite: Scanning Electron Microscopy, p. 329-340.	NA
Interdisciplinary	1984	National Research Council, 1984, Asbestiform fibers-nonoccupational health risks: Washington D.C., National Academy Press, p. 25-47.	ASBESTIFORM HABIT refers to the unusual crystallization habit of a mineral when the crystals are thin, hairlike fibers. Historically, the definition of the asbestiform habit was based primarily on appearance, and the properties were only implied. At present, the definition of asbestiform habit is often augmented to include a statement on the properties of asbestiform fibers, i.e., shape; enhanced strength, flexibility, and durability; diameter-dependent strength; and unique surfaces. The fibers of asbestos are good examples of the asbestiform habit.
Interdisciplinary	1984	Cossette, M., 1984, Defining asbestos particulates for monitoring purposes <i>in</i> Levadie, B. ed., Definitions for asbestos and other health-related silicates: ASTM Special Technical Publication 834, p. 5-49.	...a mineral structured in the form of asbestos
Interdisciplinary	1984	Ross, M., Kuntze, R.A., and Clifton, R.A., 1984, A definition for asbestos <i>in</i> Levadie, B. ed., Definitions for asbestos and other health-related silicates: ASTM Special Technical Publication 834, pp.139-147.	NA

Table 2. Asbestiform

Community	Year	Source	Asbestiform
Interdisciplinary	1988	Skinner, H.C., Ross, M., and Frondel, C., 1988, Asbestos and other fibrous materials: New York, N.Y., Oxford, 204 p.	An adjective used to describe inorganic materials that possess the form and appearance of asbestos (OED, WEB). Asbestine, asbestoid, and asbestos are obsolete synonyms. Asbestiform materials are a subset of fibrous materials. The term should be employed only when the material is one of the minerals mined as asbestos and possesses fibrosity typical of asbestos—that is, with relatively small fiber thickness, flexibility, separability, and general parallel arrangement of fibers en masse. The term asbestiform has also been used to imply that a sample or an individual fiber has morphological (gross external) characteristics similar to those of asbestos, but not necessarily the chemical or other physical properties of asbestos. In the 1700s asbestiform was used for the fibrous members of the amphibole group only. At that time virtually all asbestos in common use was amphibole-asbestos.
Interdisciplinary	1990	Mossman, B.T., Bignon, J., Corn, M., Seaton, A., and Gee, J.B.L., 1990, Asbestos-scientific developments and implications for public policy: Science, v. 247, p. 294-301.	NA
Interdisciplinary	2000	The American Heritage® Dictionary of the English Language, Fourth Edition Copyright © 2000 by Houghton Mifflin Company.	NA
Interdisciplinary	2000	Wylie, A.G., 2000, The habit of asbestiform amphiboles: implications for the analysis of bulk samples in Beard, M.E. and Rooks, H.L., eds., Advances in environmental measurement methods for asbestos: ASTM Special Technical Publication 1342, p. 53-69.	NA

Table 2. Asbestiform

Community	Year	Source	Asbestiform
Interdisciplinary	2001	Beard, M.E., Crankshaw, O.S., Ennis, J.T., and Moore, C.E., 2001, Analysis of crayons for asbestos and other fibrous materials, and recommendations for improved analytical definitions: Research Triangle Park, North Carolina, Research Triangle Institute, Center for Environmental Measurements and Quality Assurance, Earth and Mineral Sciences Department, [informal report], 23 p., plus appendices A-H.	Asbestiform fibers are those having the crystal structure of the above minerals and having physical characteristics such as (1) mean aspect ratios (length to width) of 20:1 to 100:1 or greater for individual fibers; (2) very thin fibrils usually less than 0.5 um in width; (3) and parallel fibers in bundles with splayed ends, matted masses of fibers, and/or fibers showing curvature.
Interdisciplinary	2001	Nolan, R.P., Langer, A.M., Ross, M., Wicks, F.J., and Martin, R.F., eds., 2001, The health effects of chrysotile asbestos-contribution of science to risk-management decisions: The Canadian Mineralogist Special Publication 5, 304 p.	A term used to describe minerals that possess a habit and appearance similar to that displayed by asbestos.
Medical	1977	Zielhuis, R.L., 1977, Public health risks of exposure to asbestos: Elmsford, N.Y., Pergamon Press Inc., 143 p.	NA
Medical	1979	Langer, A.M., Rohl, A.N., Wolff, M., and Selikoff, I.J., 1979, Asbestos, fibrous minerals and acicular cleavage fragments-Nomenclature and biological properties, in Lemen, R. and Dement, J.M., eds., Dust and disease: Park Forest South, Ill., Pathotox Publishers, p. 1-22.	...denotes an asbestos variety of silicate fiber; it may be used as a synonym for asbestos (Campbell et al., 1979; Zoltai, 1978). Although recommended, a current dictionary of geological terms suggests that asbestiform may be used to describe fibers which merely resemble asbestos (Thrush, 1978)
Medical	1998	Blake, T., Castranova, V., Schwegler-Berry, D., Baron, P., Deye, G.J., Li, C., and Jones, W., 1998, Effect of fiber length on glass microfiber cytotoxicity: Journal of Toxicology and Environmental Health, v. 54, p. 243-259.	NA
Medical	2001	Ninth Report on Carcinogens, January 2001 http://ehp.niehs.nih.gov/roc/ninth/known/asbestos.pdf	NA

Table 2. Asbestiform

Community	Year	Source	Asbestiform
Mineralogical	1914	Dana, E.S., 1914, The system of mineralogy of James Dwight Dana, descriptive mineralogy (6th ed): New York, N.Y., Wiley, p.	NA
Mineralogical	1977	Campbell, W.J., Blake, R.L, Brown, L.L., Cather, E.E., and Sjober, J.J., 1977, Selected silicate minerals and their asbestiform varieties: U.S. Bureau of Mines Information Circular 8751, 56 p.	A specific type of mineral fibrosity in which the fibers and fibrils posses high tensile strength and flexibility.
Mineralogical	1979	Campbell, W.J., Steel, E.B., Virta, R.L., and Eisner, M.H., 1979, Relationship of mineral habit to size characteristics for tremolite cleavage fragments and fibers: U.S. Bureau of Mines Report of Investigations 8367, 18 p.	NA
Mineralogical	1980	Bates, R.L., and Jackson, J.A., eds., 1980, Glossary of geology (2d ed.): Falls Church, Va., American Geological Institute, 749 p.	Said of a mineral that is fibrous, i.e. that is like asbestos.
Mineralogical	1982	MacKenzie, W.S., Donaldson, C.H., and Guilford, C., 1982, Atlas of igneous rocks and their textures: New York, N.Y., Wiley, p. 20.	NA
Mineralogical	1987	Dorling, M. and Zussman, J., 1987, Characteristics of asbestiform and non-asbestiform calcic amphiboles: Lithos, v. 20, p. 469-489.	NA
Mineralogical	1988	Skinner, H.C., Ross, M., and Frondel, C., 1988, Asbestos and other fibrous materials: New York, N.Y., Oxford, 204 p.	NA
Mineralogical	1993	Klein, C. and Hurlbut, C.S., Jr. ,1993, Manual of mineralogy (after James D. Dana) (21st ed.): New York, N.Y., Wiley, 681 p.	The term asbestiform refers to minerals that are mined as asbestos and possess fibrosity typical of asbestos-that is, with small fiber thickness, flexibility, and separability.

Table 2. Asbestiform

Community	Year	Source	Asbestiform
Mineralogical	1993	Veblen, D.R. and Wylie, A.G., 1993, Mineralogy of amphiboles and 1:1 layer silicates in Guthrie Jr., G.D. and Mossman, B.T., eds., Health effects of mineral dusts: Reviews in Mineralogy, v. 28, p. 61-137,	...any mineral resembling asbestos is asbestiform
Mineralogical	2001	Virta, R.L., 2001, Some facts about asbestos: U.S. Geological Survey Fact Sheet FS-012-01, 4 p.	When the length is extremely long compared with the width, the crystals are called asbestiform or fibrous.
Mineralogical	2002	http://webmineral.com/help/Fracture.html	NA
Mineralogical	2002	http://webmineral.com/help/Habits.html	NA
Regulatory	1974	U.S. District Court, district of Minnesota, 5th Division. Supplemental Memorandum. No. 5-72, Civil 19, Appendix 5, May 11, 1974, p. 24	NA
Regulatory	1976	National Institute for Occupational Safety and Health, 1976, Revised recommended asbestos standard: DHEW (NIOSH) Publication No. 77-169, 96 p.	NA
Regulatory	1983	29 CFR 1910.1001	NA
Regulatory	1990	Ohio Administrative Code (OAC) 3745-20-01	NA
Regulatory	1992	Crane, D., 1992, Polarized light microscopy of asbestos: Occupational Safety and Health Administration Method # ID-191.	NA
Regulatory	1992	Occupational Safety and Health Administration, 1992, Preambles IV. Mineralogical Considerations, National Stone Association and American Mining Congress	The asbestiform habit can be defined as a habit where mineral crystals grow in a single dimension, in a straight line until they form long, thread-like fibers with aspect ratios of 20:1 to 100:1 and higher.

Table 2. Asbestiform

Community	Year	Source	Asbestiform
Regulatory	1993	Perkins, R.L. and Harvey, B.W., 1993, Method for the determination of asbestos in bulk building materials: U.S. Environmental Protection Agency EPA/600/R-93/116, Office of Research and Development, Washington, D.C.	(morphology) Said of a mineral that is like asbestos, i.e., crystallized with the habit of asbestos. Some asbestiform minerals may lack the properties which make asbestos commercially valuable, such as long fiber length and high tensile strength. With the light microscope, the asbestiform habit is generally recognized by the following characteristics: 1) Mean aspect ratios ranging from 20:1 to 100:1 or higher for fibers longer than 5 um. Aspect ratios should be determined for fibers, not bundles. 2) Very thin fibrils, usually less than 0.5 micrometers in width, and 3) Two or more of the following: a) Parallel fibers occurring in bundles, b) Fiber bundles displaying splayed ends, c) matted masses of individual fibers, and/or d) Fibers showing curvature. These characteristics refer to the population of fibers as observed in a bulk sample. It is not unusual to observe occasional particles having aspect ratios of 10:1 or less, but it is unlikely that the asbestos component(s) would be dominated by particles (individual fibers) having aspect ratios of <20:1 for fibers longer than 5um. If a sample contains a fibrous component of which most of the fibers have aspect ratios of <20:1 and that do not display the additional asbestiform characteristics, by definition the component should not be considered asbestos.
Regulatory	1993	Occupational Safety and Health Administration, 1993, Better protection against asbestos in the workplace: U.S. Department of Labor Fact Sheet No. OSHA 93-06. Available on the world wide web at http://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=FACT_SHEETS&p_id=144	NA
Regulatory	1995	American Society for Testing and Materials, 1995, Standard test method for microvacuum sampling and indirect analysis of dust by transmission electron microscopy for asbestos structure number concentrations: West Conshohocken, Pa., ASTM 5755-95, 13 p.	a special type of fibrous habit in which the fibers are separable into thinner fibers and ultimately into fibrils. This habit accounts for greater flexibility and higher tensile strength than other habits of the same mineral.

Table 2. Asbestiform

Community	Year	Source	Asbestiform
Regulatory	1995	International Organization for Standardization, 1995, ISO 10312 Ambient air-determination of asbestos fibres-direct-transfer transmission electron microscopy method (1st ed): Geneve, Switzerland, International Organization for Standardization, 51 p.	A specific type of mineral fibrosity in which the fibres and fibrils posses high tensile strength and flexibility.
Regulatory	1996	Colorado Air Quality Control Commission, 1996, Part B-emission standards for asbestos, <i>excerpted from</i> Regulation No. 8 "The control of hazardous air pollutants": Colorado Department of Public Health and Environment, 114 p.	NA
Regulatory	1997	Crane, D., 1997, Asbestos in air: Occupational Safety and Health Administration Method # ID-160.	NA
Regulatory	1997	NYCRR (New York Code of Rules & Regulations) Title 10 Section 73.1	NA
Regulatory	2001	Environmental Protection Agency Part 763-Asbestos Subpart E--Asbestos-Containing Materials in Schools (7-1-01 Edition)	NA
Regulatory	2001	Environmental Protection Agency Part 763-Asbestos Subpart E--Asbestos-Containing Materials in Schools Appendix A (7-1-01 Edition)	A specific type of mineral fibrosity in which the fibers and fibrils possess high tensile strength and flexibility
Regulatory	2001	29 CFR 1910.1001	NA
Regulatory	2001	30 CFR 56.5001	NA
Regulatory	2001	17 CCR (California Code of Regulations) 93105	NA
Regulatory	2001	West Virginia Code 16-32-2	NA
Regulatory	2002	OAR (Oregon Administrative Rules) 340-248-0010	NA
Regulatory	2002	105 ILCS (Illinois Compiled Statutes Schools) 105/3	NA

Table 3. Asbestos

Community	Year	Source	Asbestos
Industrial	1975	Winson, R.W., 1975, Asbestos, <i>in</i> , Industrial minerals and rocks (nonmetallics other than fuels): New York, N.Y., American Institute of Mining, Metallurgical, and Petroleum Engineers, Inc., p. 379-425.	...is a generic name given to a group of fibrous mineral silicates found in nature. They are all incombustible and can be separated by mechanical means into fibers of various lengths and cross sections, but each differs in chemical composition from the other.
Industrial	1981	Steel, E. and Wylie, A., 1981, Mineralogical characteristics of asbestos <i>in</i> Riordon, P.H. ed, Geology of Asbestos Deposits, Society of Mining Engineers, p. 93-100.	NA
Industrial	1998	Virta, R.L., 2002, Asbestos: U.S. Geological Survey Open File-Report 02-149, 35 p.	...is a generic name given to six fibrous minerals that have been used in commercial products. The six types of asbestos are chrysotile, the most widely used; crocidolite; amosite; anthophyllite asbestos; tremolite asbestos; and actinolite asbestos. The properties that make asbestos so versatile and cost effective are high tensile strength, chemical and thermal stability, high flexibility, low electrical conductivity, and larger surface area.
Interdisciplinary	1974	Thompson, C.S., 1974, Discussion of the mineralogy of industrial talcs: U.S. Bureau of Mines Information Circular 8639, p. 22-42.	The term "asbestos" is a nonscientific commercial term normally restricted in use to the long, threadlike fibrous varieties of several hydrated silicate minerals, whose fibers can be separated mechanically and pressed, spun, or woven into articles of all types that are resistant to heat and chemical alteration. Although present usage is generally limited to the commercially available silicate minerals, chrysotile, crocidolite, amosite, anthophyllite asbestos, tremolite asbestos, and actinolite asbestos, other minerals regardless of chemical composition, which possess similar qualities of great elongation, flexibility, high-tensile strength, heat and chemical resistance, spinability, etc., could properly be classified as asbestos.
Interdisciplinary	1978	Zoltai, Tibor, 1978, History of asbestos-related mineralogical terminology: National Bureau of Standards Special Publication 506, p. 1-18.	A collective mineralogical term which includes the asbestiform varieties of various (silicate) minerals.

Table 3. Asbestos

Community	Year	Source	Asbestos
Interdisciplinary	1979	Chatfield, E.J., 1979, Measurement of asbestos fibres in the workplace and in the general environment <i>in</i> Ledoux, R.L., Mineralogical techniques of asbestos determination: Mineralogical Association of Canada Short Course, v. 4, p. 111-157.	Asbestos is a term used to describe a number of minerals which have the property that they can be separated into long silky fibres.
Interdisciplinary	1980	Dixon, W.C., 1980, Applications of optical microscopy in analysis of asbestos and quartz, <i>chap 2 of</i> Dollberg, D.D. and Werstuyft, A.W., eds., Analytical techniques in occupational health chemistry: Washington, D.C., American Chemical Society, p. 13-41.	[<i>Author quotes the federal register</i>] 1. Asbestos includes chrysotile, amosite, crocidolite, tremolite, anthophyllite and actinolite. 2. "Asbestos fibers" means asbestos fibers longer than 5 micrometers.
Interdisciplinary	1980	Clark, R.L., 1982, MSHA standard method for fiber identification by electron microscopy: National Bureau of Standards Special Publication 619, p. 207-210.	[<i>uses Code of Federal Regulations</i>] "asbestos" is recognized as generic, applicable to a number of hydrated silicates, but its use is specifically limited to describe the minerals chrysotile, amosite, crocidolite, anthophyllite asbestos, tremolite asbestos, and actinolite asbestos.
Interdisciplinary	1980	Lee, R.J., Kelly, J.F., and Walker, J.S., 1982, Considerations in the analysis and definition of asbestos using electron microscopy: National Bureau of Standards Special Publication 619, p. 132-137.	...meaningful working definition of asbestos, we propose the following: 1. For routine method, a minimum aspect ratio of 10:1 should be used in a screening analysis or survey. Existing data indicate that this would not affect the chrysotile analysis at all and amphibole analysis only when the sample contains a significant percentage of acicular nonasbestos particles [11-16]. While this would undoubtedly result in missing 5 to 20 percent of the short asbestos particles, it would eliminate 70 to 80 percent of the nonasbestos particles from consideration. 2. A lower length limit for routine electron microscope analysis should be adopted. On the basis of available information, a reasonable limit would be somewhere between 0.75 and 2.0 microns [3]. 3. Asbestos analyses should be grouped into at least three size fractions and acceptable uncertainty levels defined for each range. For example, the length categories less than 2, 2 to 5, and greater than 5 um might be chosen, and a 50 percent relative error defined as the minimum level of acceptance for each size range.

Table 3. Asbestos

Community	Year	Source	Asbestos
Interdisciplinary	1980	Chatfield, E.J. and Lewis, G.M., 1980, Development and application of an analytical technique for measurement of asbestos fibers in vermiculite: Scanning Electron Microscopy, p. 329-340.	NA
Interdisciplinary	1984	National Research Council, 1984, Asbestiform fibers-nonoccupational health risks: Washington D.C., National Academy Press, p. 25-47.	The term ASBESTOS is a commercial-industrial term rather than a mineralogical term. It refers to well-developed and hairlike long-fibered varieties of certain minerals that satisfy particular industrial needs. Table 2-1 lists the names of chemical formulas of the minerals included in the term asbestos. Other minerals used in industry, such as palygorskite, may also crystallize as well-developed, thin hairlike fibers (i.e., in the asbestiform habit), but they are not called asbestos. [<i>Minerals listed in Table 2-1: chrysotile, riebeckite, anthophyllite, cummingtonite-grunerite, actinolite-tremolite</i>]
Interdisciplinary	1984	Cossette, M., 1984, Defining asbestos particulates for monitoring purposes <i>in</i> Levadie, B. ed., Definitions for asbestos and other health-related silicates: ASTM Special Technical Publication 834, p. 5-49.	...a generic term for naturally occurring inorganic hydrated silicates, occurring in layered structures composed of chains of silicon/oxygen tetrahedra, which can subdivide into flexible fibers
Interdisciplinary	1984	Ross, M., Kuntze, R.A., and Clifton, R.A., 1984, A definition for asbestos <i>in</i> Levadie, B. ed., Definitions for asbestos and other health-related silicates: ASTM Special Technical Publication 834, pp.139-147.	...a term applied to six naturally occurring minerals exploited commercially for their desirable physical properties, which are in part derived from their asbestiform habit. The six minerals are the serpentine mineral chrysotile and the amphibole minerals grunerite asbestos (also referred to as amosite), riebeckite asbestos (also referred to as crocidolite), anthophyllite asbestos, tremolite asbestos, and actinolite asbestos... Individual mineral particles, however processed and regardless of their mineral name, are not demonstrated to be asbestos if the length-to-width ratio is less than 20:1.

Table 3. Asbestos

Community	Year	Source	Asbestos
Interdisciplinary	1988	Skinner, H.C., Ross, M., and Frondel, C., 1988, Asbestos and other fibrous materials: New York, N.Y., Oxford, 204 p.	A commercial and generally used name for fibrous varieties of naturally occurring silicate minerals of the amphibole or serpentine group (see chapter 2). Over the millennia many fibrous minerals have been called asbestos, including the six minerals presently accepted (see in the following), as well as other silicates such as palygorskite and nonsilicates such as brucite. The characteristics of mineral materials that have invoked the use of the term asbestos are: slender fibers that are easily separable and flexible, and fine fibers that have high tensile strength, chemical stability, and are incombustible. Natural unprocessed asbestos fibers have large aspect ratios and may have lengths of microscopic dimensions up to, in rare instances, a meter or so. Chrysotile-asbestos fibers are commonly 10 centimeters in length...Asbestos is used as an adjective in combination with numerous other words and phases, such as asbestos cement.
Interdisciplinary	1990	Mossman, B.T., Bignon, J., Corn, M., Seaton, A., and Gee, J.B.L., 1990, Asbestos-scientific developments and implications for public policy: Science, v. 247, p. 294-301.	"Asbestos" is a broad commercial term for a group of naturally occurring hydrated silicates that crystallize in a fibrous habit.
Interdisciplinary	2000	The American Heritage® Dictionary of the English Language, Fourth Edition Copyright © 2000 by Houghton Mifflin Company.	n. Either of two incombustible, chemical-resistant, fibrous mineral forms of impure magnesium silicate, used for fireproofing, electrical insulation, building materials, brake linings, and chemical filters.
Interdisciplinary	2000	Wylie, A.G., 2000, The habit of asbestiform amphiboles: implications for the analysis of bulk samples <i>in</i> Beard, M.E. and Rooks, H.L, eds., Advances in environmental measurement methods for asbestos: ASTM Special Technical Publication 1342, p. 53-69.	NA

Table 3. Asbestos

Community	Year	Source	Asbestos
Interdisciplinary	2001	Beard, M.E., Crankshaw, O.S., Ennis, J.T., and Moore, C.E., 2001, Analysis of crayons for asbestos and other fibrous materials, and recommendations for improved analytical definitions: Research Triangle Park, North Carolina, Research Triangle Institute, Center for Environmental Measurements and Quality Assurance, Earth and Mineral Sciences Department, [informal report], 23 p., plus appendices A-H.	Asbestos is a commercial term for long, thin mineral fibers of chrysotile, amosite, crocidolite, anthophyllite, tremolite, and actinolite.
Interdisciplinary	2001	Nolan, R.P., Langer, A.M., Ross, M., Wicks, F.J., and Martin, R.F., eds., 2001, The health effects of chrysotile asbestos-contribution of science to risk-management decisions: The Canadian Mineralogist Special Publication 5, 304 p.	A commercial term that describes a group of extremely thin and flexible minerals that have a unique combination of physical and chemical properties. The long asbestos fibers can be spun in yarn and then made into woven fabric. Asbestos is derived from a Greek word meaning inextinguishable in the sense of indestructible, because asbestos cannot be destroyed by fire. Modern usage in mineralogy occurred when the term was applied to a fibrous amphibole mineral discovered in the Alps.
Medical	1977	Zielhuis, R.L., 1977, Public health risks of exposure to asbestos: Elmsford, N.Y., Pergamon Press Inc., 143 p.	Asbestos refers to a group of inorganic silicates which occur naturally and have a distinct fibrous crystalline structure, which is largely responsible for its unique properties: tensile strength, stiffness, heat resistance, and ability to split into finer fibres.
Medical	1979	Langer, A.M., Rohl, A.N., Wolff, M., and Selikoff, I.J., 1979, Asbestos, fibrous minerals and acicular cleavage fragments-Nomenclature and biological properties, in Lemen, R. and Dement, J.M., eds., Dust and disease: Park Forest South, Ill., Pathotox Publishers, p. 1-22.	The term "asbestos" may be used to describe a mineral species only when its physical characteristics, on the megascopic level, are known: the mineral fiber possesses tensile strength, flexibility, and those other characteristics which distinguishes asbestiform minerals from their rock-forming analogues. Asbestos may also be applied to submicroscopic fibers if the source materials are known; for example, in an asbestos textile factory where chrysotile fiber is used.
Medical	1998	Blake, T., Castranova, V., Schwegler-Berry, D., Baron, P., Deye, G.J., Li, C., and Jones, W., 1998, Effect of fiber length on glass microfiber cytotoxicity: Journal of Toxicology and Environmental Health, v. 54, p. 243-259.	...refers to a group of naturally occurring fibrous metallic silicates that have been used widely in construction and industry.

Table 3. Asbestos

Community	Year	Source	Asbestos
Medical	2001	Ninth Report on Carcinogens, January 2001 http://ehp.niehs.nih.gov/roc/ninth/known/asbestos.pdf	...is a generic name given to a class of natural fibrous silicates that vary considerably in their physical and chemical properties.
Mineralogical	1914	Dana, E.S., 1914, The system of mineralogy of James Dwight Dana, descriptive mineralogy (6th ed): New York, N.Y., Wiley, p.	Asbestos. Asbestos. Tremolite, actinolite, and other varieties of amphibole, excepting those containing much alumina, pass into fibrous varieties, the fibers of which are sometimes very long, fine, flexible, and easily separable by the fingers and look like flax. These kinds are called asbestos.
Mineralogical	1977	Campbell, W.J., Blake, R.L., Brown, L.L., Cather, E.E., and Sjober, J.J., 1977, Selected silicate minerals and their asbestiform varieties: U.S. Bureau of Mines Information Circular 8751, 56 p.	(1) A collective mineralogical term encompassing the asbestiform varieties of various minerals; (2) an industrial product obtained by mining and processing primarily asbestiform minerals.
Mineralogical	1979	Campbell, W.J., Steel, E.B., Virta, R.L., and Eisner, M.H., 1979, Relationship of mineral habit to size characteristics for tremolite cleavage fragments and fibers: U.S. Bureau of Mines Report of Investigations 8367, 18 p.	NA
Mineralogical	1980	Bates, R.L., and Jackson, J.A., eds., 1980, Glossary of geology (2d ed.): Falls Church, Va., American Geological Institute, 749 p.	(a) A commercial term applied to a group of highly fibrous silicate minerals that readily separate into long, thin, strong fibers of sufficient flexibility to be woven, are heat resistant and chemically inert, and possess a high electric insulation, and therefore are suitable for uses (as in yarn, cloth, paper, paint, brake linings, tiles, insulation, cement, fillers, and filters) where incombustible, nonconducting, or chemically resistant material is required. (b) A mineral of the asbestos group, principally chrysotile (best adapted for spinning) and certain fibrous varieties of amphibole (esp. tremolite, actinolite, and crocidolite). (c) A term strictly applied to the fibrous variety of actinolite.---Syn: <i>asbestos</i> ; <i>amianthus</i> ; <i>earth flax</i> ; <i>mountain flax</i> .
Mineralogical	1982	MacKenzie, W.S., Donaldson, C.H., and Guilford, C., 1982, Atlas of igneous rocks and their textures: New York, N.Y., Wiley, p. 20.	NA
Mineralogical	1987	Dorling, M. and Zussman, J., 1987, Characteristics of asbestiform and non-asbestiform calcic amphiboles: Lithos, v. 20, p. 469-489.	In this study, only specimens [<i>in reference to calcic amphiboles</i>] which occur as bundles of fibres (commonly having splayed ends), which readily split into still finer sub-microscopic units (fibrils), are referred to and are classed as asbestos.

Table 3. Asbestos

Community	Year	Source	Asbestos
Mineralogical	1988	Skinner, H.C., Ross, M., and Frondel, C., 1988, Asbestos and other fibrous materials: New York, N.Y., Oxford, 204 p.	NA
Mineralogical	1993	Klein, C. and Hurlbut, C.S., Jr., 1993, Manual of mineralogy (after James D. Dana) (21st ed.): New York, N.Y., Wiley, 681 p.	The characteristic morphology of all asbestos minerals, in their natural form, is a parallel-sided fiber with a length to width ratio (referred to as an aspect ratio) in excess of 100:1 (Champness, P.E., Cliff, G. and Lorimer, G.W., 1976, The identification of asbestos, <i>Journal of Microscopy</i> , v. 108, pp. 231-249).
Mineralogical	1993	Veblen, D.R. and Wylie, A.G., 1993, Mineralogy of amphiboles and 1:1 layer silicates in Guthrie Jr., G.D. and Mossman, B.T., eds., Health effects of mineral dusts: Reviews in Mineralogy, v. 28, p. 61-137,	Asbestos is defined as a group of highly fibrous silicate minerals that readily separate into long, thin, strong fibers that have sufficient flexibility to be woven, are heat resistant and chemically inert, are electrical insulators, and therefore are suitable for uses where incombustible, nonconducting, or chemically resistant material is required.
Mineralogical	2001	Virta, R.L., 2001, Some facts about asbestos: U.S. Geological Survey Fact Sheet FS-012-01, 4 p.	...is a generic name given to the fibrous variety of six naturally occurring minerals that have been used in commercial products. Asbestos is made up of fiber bundles. These bundles, in turn, are composed of extremely long and thin fibers that can be easily separated from one another. The bundles have splaying ends and are extremely flexible. The term "asbestos" is not a mineralogical definition. It is a commercial designation for mineral products that possess high tensile strength, flexibility, resistance to chemical and thermal degradation, and high electrical resistance and that can be woven.
Mineralogical	2002	http://webmineral.com/help/Fracture.html	NA
Mineralogical	2002	http://webmineral.com/help/Habits.html	NA
Regulatory	1974	U.S. District Court, district of Minnesota, 5th Division. Supplemental Memorandum. No. 5-72, Civil 19, Appendix 5, May 11, 1974, p. 24	...is a generic term for a number of hydrated silicates that, when crushed or processed, separate into flexible fibers made up of fibrils.
Regulatory	1976	National Institute for Occupational Safety and Health, 1976, Revised recommended asbestos standard: DHEW (NIOSH) Publication No. 77-169, 96 p.	Asbestos fibers are defined as those particles with a length greater than 5 um and a length-to-diameter ratio of 3:1, or greater.
Regulatory	1983	29 CFR 1910.1001	For the purpose of this section, (1) "Asbestos" includes chrysotile, amosite, crocidolite, tremolite, anthophyllite, and actinolite.

Table 3. Asbestos

Community	Year	Source	Asbestos
Regulatory	1990	Ohio Administrative Code (OAC) 3745-20-01	"Asbestos" means the asbestiform varieties of serpentinite (chrysotile), riebeckite (crocidolite), cummingtonite-grunerite, anthophyllite, and actinolite tremolite.
Regulatory	1992	Crane, D., 1992, Polarized light microscopy of asbestos: Occupational Safety and Health Administration Method # ID-191.	A term for naturally occurring fibrous minerals. Asbestos includes chrysotile, cummingtonite-grunerite asbestos (amosite), anthophyllite asbestos, tremolite asbestos, crocidolite, actinolite asbestos and any of these minerals which have been chemically treated or altered. The precise chemical formulation of each species varies with the location from which it was mined.
Regulatory	1992	Occupational Safety and Health Administration, 1992, Preambles IV. Mineralogical Considerations, National Stone Association and American Mining Congress	NA
Regulatory	1993	Perkins, R.L. and Harvey, B.W., 1993, Method for the determination of asbestos in bulk building materials: U.S. Environmental Protection Agency EPA/600/R-93/116, Office of Research and Development, Washington, D.C.	A commercial term applied to the asbestiform varieties of six different minerals. The asbestos types are chrysotile (asbestiform serpentine), amosite (asbestiform grunerite), crocidolite (asbestiform riebeckite), and asbestiform anthophyllite, asbestiform tremolite, and asbestiform actinolite. The properties of asbestos that caused it to be widely used commercially are: 1) its ability to be separated into long, thin flexible fibers; 2) high tensile strength; 3) low thermal and electrical conductivity; 4) high mechanical and chemical durability, and 5) high heat resistance.
Regulatory	1993	Occupational Safety and Health Administration, 1993, Better protection against asbestos in the workplace: U.S. Department of Labor Fact Sheet No. OSHA 93-06. Available on the world wide web at http://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=FACT_SHEETS&p_id=144	...is a widely used, mineral-based material that is resistant to heat and corrosive chemicals. Typically, asbestos appears as a whitish, fibrous material which may release fibers that range in texture from coarse to silky; however, airborne fibers that can cause health damage may be too small to see with the naked eye.
Regulatory	1995	American Society for Testing and Materials, 1995, Standard test method for microvacuum sampling and indirect analysis of dust by transmission electron microscopy for asbestos structure number concentrations: West Conshohocken, Pa., ASTM 5755-95, 13 p.	...a collective term that describes a group of naturally occurring, inorganic, highly fibrous, silicate dominated minerals, which are easily separated into long, thin, flexible fibers when crushed or processed.

Table 3. Asbestos

Community	Year	Source	Asbestos
Regulatory	1995	International Organization for Standardization, 1995, ISO 10312 Ambient air-determination of asbestos fibres-direct-transfer transmission electron microscopy method (1st ed): Geneve, Switzerland, International Organization for Standardization, 51 p.	A term applied to a group of silicate minerals belonging to the serpentine and amphibole groups which have crystallized in the asbestiform habit, causing them to be easily separated into long, thin, strong fibres when crushed or processed. The Chemical Abstracts Service Registry Numbers of the common asbestos varieties are: chrysotile (12001-29-5), crocidolite (12001-28-4), grunerite asbestos (amosite) (12172-73-5), anthophyllite asbestos (77536-67-5), tremolite asbestos (77536-68-6) and actinolite asbestos (77536-66-4).
Regulatory	1996	Colorado Air Quality Control Commission, 1996, Part B-emission standards for asbestos, <i>excerpted from</i> Regulation No. 8 "The control of hazardous air pollutants": Colorado Department of Public Health and Environment, 114 p.	means asbestiform varieties of chrysotile, amosite (cummingtonite-grunerite), crocidolite, anthophyllite, tremolite, and actinolite.
Regulatory	1997	Crane, D., 1997, Asbestos in air: Occupational Safety and Health Administration Method # ID-160.	A term for naturally occurring fibrous minerals. Asbestos includes chrysotile, cummingtonite-grunerite asbestos (amosite), anthophyllite asbestos, tremolite asbestos, crocidolite, actinolite asbestos and any of these minerals which have been chemically treated or altered. The precise chemical formulation of each species varies with the location from which it was mined...
Regulatory	1997	NYCRR (New York Code of Rules & Regulations) Title 10 Section 73.1	Asbestos. Any naturally occurring hydrated mineral silicate separable into commercially usable fibers, including chrysotile (serpentine), amosite (cummingtonite-grunerite), crocidolite (riebeckite), tremolite, anthophyllite and actinolite.
Regulatory	2001	Environmental Protection Agency Part 763-Asbestos Subpart E--Asbestos-Containing Materials in Schools (7-1-01 Edition)	...means the asbestiform varieties of: Chrysotile (serpentine); crocidolite (riebeckite); amosite (cummingtonite-grunerite); anthophyllite; tremolite; and actinolite.
Regulatory	2001	Environmental Protection Agency Part 763-Asbestos Subpart E--Asbestos-Containing Materials in Schools Appendix A (7-1-01 Edition)	NA
Regulatory	2001	29 CFR 1910.1001	Asbestos includes chrysotile, amosite, crocidolite, tremolite asbestos, anthophyllite asbestos, actinolite asbestos, and any of these minerals that have been chemically treated and/or altered.

Table 3. Asbestos

Community	Year	Source	Asbestos
Regulatory	2001	30 CFR 56.5001	..."Asbestos" is a generic term for a number of hydrated silicates that, when crushed or processed, separate into flexible fibers made up of fibrils. Although there are many asbestos minerals, the term "asbestos" as used herein is limited to the following minerals: chrysotile, amosite, crocidolite, anthophyllite asbestos, tremolite asbestos, and actinolite asbestos.
Regulatory	2001	17 CCR (California Code of Regulations) 93105	"Asbestos" means asbestiforms* of the following minerals: chrysotile (fibrous serpentine), crocidolite (fibrous riebeckite), amosite (fibrous cummingtonite-grunerite), fibrous tremolite, fibrous actinolite, and fibrous anthophyllite. <i>*[It is assumed that the authors of the above entry intended for the word "asbestiforms" to be interpreted as asbestiform varieties of these minerals. This unusual application of the term would probably not be considered appropriate by most workers in the mineralogical community.]</i>
Regulatory	2001	West Virginia Code 16-32-2	Asbestos means the asbestiform varieties of chrysotile (serpentine), crocidolite (riebeckite), amosite (cummingtonite-grunerite), anthophyllite, tremolite and actinolite.
Regulatory	2002	OAR (Oregon Administrative Rules) 340-248-0010	"Asbestos" means the asbestiform varieties of serpentine (chrysotile), riebeckite (crocidolite), cummingtonite-grunerite (amosite), anthophyllite, actinolite and tremolite.
Regulatory	2002	105 ILCS (Illinois Compiled Statutes Schools) 105/3	"Asbestos" means the asbestiform varieties of chrysotile, amosite, crocidolite, tremolite, anthophyllite, and actinolite.

Table 4. Cleavage

Community	Year	Source	Cleavage
Industrial	1975	Winson, R.W., 1975, Asbestos, <i>in</i> , Industrial minerals and rocks (nonmetallics other than fuels): New York, N.Y., American Institute of Mining, Metallurgical, and Petroleum Engineers, Inc., p. 379-425.	NA
Industrial	1981	Steel, E. and Wylie, A., 1981, Mineralogical characteristics of asbestos <i>in</i> Riordon, P.H. ed, Geology of Asbestos Deposits, Society of Mining Engineers, p. 93-100.	NA
Industrial	1998	Virta, R.L., 2002, Asbestos: U.S. Geological Survey Open File-Report 02-149, 35 p.	NA
Interdisciplinary	1974	Thompson, C.S., 1974, Discussion of the mineralogy of industrial talcs: U.S. Bureau of Mines Information Circular 8639, p. 22-42.	NA
Interdisciplinary	1978	Zoltai, Tibor, 1978, History of asbestos-related mineralogical terminology: National Bureau of Standards Special Publication 506, p. 1-18.	NA
Interdisciplinary	1979	Chatfield, E.J., 1979, Measurement of asbestos fibres in the workplace and in the general environment <i>in</i> Ledoux, R.L., Mineralogical techniques of asbestos determination: Mineralogical Association of Canada Short Course, v. 4, p. 111-157.	NA
Interdisciplinary	1980	Dixon, W.C., 1980, Applications of optical microscopy in analysis of asbestos and quartz, <i>chap 2 of</i> Dollberg, D.D. and Werstuyft, A.W., eds., Analytical techniques in occupational health chemistry: Washington, D.C., American Chemical Society, p. 13-41.	A mineral has cleavage if it breaks along definite plane surfaces.
Interdisciplinary	1980	Clark, R.L., 1982, MSHA standard method for fiber identification by electron microscopy: National Bureau of Standards Special Publication 619, p. 207-210.	NA

Table 4. Cleavage

Community	Year	Source	Cleavage
Interdisciplinary	1980	Lee, R.J., Kelly, J.F., and Walker, J.S., 1982, Considerations in the analysis and definition of asbestos using electron microscopy: National Bureau of Standards Special Publication 619, p. 132-137.	NA
Interdisciplinary	1980	Chatfield, E.J. and Lewis, G.M., 1980, Development and application of an analytical technique for measurement of asbestos fibers in vermiculite: Scanning Electron Microscopy, p. 329-340.	NA
Interdisciplinary	1984	National Research Council, 1984, Asbestiform fibers-nonoccupational health risks: Washington D.C., National Academy Press, p. 25-47.	CLEAVAGE refers to the preferential breakage of crystals along certain planes of structural weakness. Such planes of weakness are called cleavage planes. A mineral with two distinct cleavage planes will preferentially fracture along these planes and will produce ACICULAR fragments...The strength and flexibility of cleavage fragments are approximately the same as those of single crystals. Cleavage cannot produce the high strength and flexibility of asbestiform fibers.
Interdisciplinary	1984	Cossette, M., 1984, Defining asbestos particulates for monitoring purposes <i>in</i> Levadie, B. ed., Definitions for asbestos and other health-related silicates: ASTM Special Technical Publication 834, p. 5-49.	NA
Interdisciplinary	1984	Ross, M., Kuntze, R.A., and Clifton, R.A., 1984, A definition for asbestos <i>in</i> Levadie, B. ed., Definitions for asbestos and other health-related silicates: ASTM Special Technical Publication 834, pp.139-147.	NA
Interdisciplinary	1988	Skinner, H.C., Ross, M., and Frondel, C., 1988, Asbestos and other fibrous materials: New York, N.Y., Oxford, 204 p.	The property of an individual crystal to fracture or break, producing planar surfaces along specific crystallographic directions dictated by the structure of the material. Some crystals lack cleavage; others possess one or more crystallographically distinct cleavage directions (see chapter 1).
Interdisciplinary	1990	Mossman, B.T., Bignon, J., Corn, M., Seaton, A., and Gee, J.B.L., 1990, Asbestos-scientific developments and implications for public policy: Science, v. 247, p. 294-301.	NA

Table 4. Cleavage

Community	Year	Source	Cleavage
Interdisciplinary	2000	The American Heritage® Dictionary of the English Language, Fourth Edition Copyright © 2000 by Houghton Mifflin Company.	1. Mineralogy. The splitting or tendency to split of a crystallized substance along definite crystalline planes, yielding smooth surfaces.
Interdisciplinary	2000	Wylie, A.G., 2000, The habit of asbestiform amphiboles: implications for the analysis of bulk samples <i>in</i> Beard, M.E. and Rooks, H.L, eds., Advances in environmental measurement methods for asbestos: ASTM Special Technical Publication 1342, p. 53-69.	weakness inherent in a "perfect" structure
Interdisciplinary	2001	Beard, M.E., Crankshaw, O.S., Ennis, J.T., and Moore, C.E., 2001, Analysis of crayons for asbestos and other fibrous materials, and recommendations for improved analytical definitions: Research Triangle Park, North Carolina, Research Triangle Institute, Center for Environmental Measurements and Quality Assurance, Earth and Mineral Sciences Department, [informal report], 23 p., plus appendices A-H.	NA
Interdisciplinary	2001	Nolan, R.P., Langer, A.M., Ross, M., Wicks, F.J., and Martin, R.F., eds., 2001, The health effects of chrysotile asbestos-contribution of science to risk-management decisions: The Canadian Mineralogist Special Publication 5, 304 p.	NA
Medical	1977	Zielhuis, R.L., 1977, Public health risks of exposure to asbestos: Elmsford, N.Y., Pergamon Press Inc., 143 p.	NA
Medical	1979	Langer, A.M., Rohl, A.N., Wolff, M., and Selikoff, I.J., 1979, Asbestos, fibrous minerals and acicular cleavage fragments-Nomenclature and biological properties, <i>in</i> Lemen, R. and Dement, J.M., eds., Dust and disease: Park Forest South, Ill., Pathotox Publishers, p. 1-22.	...in minerals is normally defined as planar separation occurring along crystallographic planes with the lowest surface energies.

Table 4. Cleavage

Community	Year	Source	Cleavage
Medical	1998	Blake, T., Castranova, V., Schwegler-Berry, D., Baron, P., Deye, G.J., Li, C., and Jones, W., 1998, Effect of fiber length on glass microfiber cytotoxicity: Journal of Toxicology and Environmental Health, v. 54, p. 243-259.	NA
Medical	2001	Ninth Report on Carcinogens, January 2001 http://ehp.niehs.nih.gov/roc/ninth/known/asbestos.pdf	NA
Mineralogical	1914	Dana, E.S., 1914, The system of mineralogy of James Dwight Dana, descriptive mineralogy (6th ed): New York, N.Y., Wiley, p.	...is a fracture yielding a more or less smooth surface in the crystal, usually along one of the principal planes of the lattice. The cleavage is characterized by the plane, the ease of production and the character of the surface
Mineralogical	1977	Campbell, W.J., Blake, R.L, Brown, L.L., Cather, E.E., and Sjober, J.J., 1977, Selected silicate minerals and their asbestiform varieties: U.S. Bureau of Mines Information Circular 8751, 56 p.	The tendency of a crystal to break in definite directions that are related to the crystal structure and are always parallel to possible crystal faces.
Mineralogical	1979	Campbell, W.J., Steel, E.B., Virta, R.L., and Eisner, M.H., 1979, Relationship of mineral habit to size characteristics for tremolite cleavage fragments and fibers: U.S. Bureau of Mines Report of Investigations 8367, 18 p.	NA
Mineralogical	1980	Bates, R.L., and Jackson, J.A., eds., 1980, Glossary of geology (2d ed.): Falls Church, Va., American Geological Institute, 749 p.	[mineral] The breaking of a mineral along its crystallographic planes, thus reflecting crystal structure. The types of cleavage are named according to the structure, e.g. prismatic cleavage. Cf: fracture [mineral]; parting [cryst].
Mineralogical	1982	MacKenzie, W.S., Donaldson, C.H., and Guilford, C., 1982, Atlas of igneous rocks and their textures: New York, N.Y., Wiley, p. 20.	NA
Mineralogical	1987	Dorling, M. and Zussman, J., 1987, Characteristics of asbestiform and non-asbestiform calcic amphiboles: Lithos, v. 20, p. 469-489.	NA
Mineralogical	1988	Skinner, H.C., Ross, M., and Frondel, C., 1988, Asbestos and other fibrous materials: New York, N.Y., Oxford, 204 p.	NA

Table 4. Cleavage

Community	Year	Source	Cleavage
Mineralogical	1993	Klein, C. and Hurlbut, C.S., Jr., 1993, Manual of mineralogy (after James D. Dana) (21st ed.): New York, N.Y., Wiley, 681 p.	...is the tendency of minerals to break parallel to atomic planes that are identified by Miller indices, just as the faces of the external form of a crystal
Mineralogical	1993	Veblen, D.R. and Wylie, A.G., 1993, Mineralogy of amphiboles and 1:1 layer silicates in Guthrie Jr., G.D. and Mossman, B.T., eds., Health effects of mineral dusts: Reviews in Mineralogy, v. 28, p. 61-137,	Cleavage refers to breakage of a mineral on an approximately planar surface that is controlled by its crystal structure.
Mineralogical	2001	Virta, R.L., 2001, Some facts about asbestos: U.S. Geological Survey Fact Sheet FS-012-01, 4 p.	NA
Mineralogical	2002	http://webmineral.com/help/Fracture.html	If a mineral is strained beyond its elastic limits, it will break. If it breaks irregularly then it shows fracture, if it breaks along regular surfaces related to the crystal structure then it shows cleavage. This cleavage depends on weaknesses in the crystalline make-up of the mineral and is a diagnostic property which can reveal additional information about the mineral.
Mineralogical	2002	http://webmineral.com/help/Habits.html	NA
Regulatory	1974	U.S. District Court, district of Minnesota, 5th Division. Supplemental Memorandum. No. 5-72, Civil 19, Appendix 5, May 11, 1974, p. 24	NA
Regulatory	1976	National Institute for Occupational Safety and Health, 1976, Revised recommended asbestos standard: DHEW (NIOSH) Publication No. 77-169, 96 p.	NA
Regulatory	1983	29 CFR 1910.1001	NA
Regulatory	1990	Ohio Administrative Code (OAC) 3745-20-01	NA
Regulatory	1992	Crane, D., 1992, Polarized light microscopy of asbestos: Occupational Safety and Health Administration Method # ID-191.	NA
Regulatory	1992	Occupational Safety and Health Administration, 1992, Preambles IV. Mineralogical Considerations, National Stone Association and American Mining Congress	NA

Table 4. Cleavage

Community	Year	Source	Cleavage
Regulatory	1993	Perkins, R.L. and Harvey, B.W., 1993, Method for the determination of asbestos in bulk building materials: U.S. Environmental Protection Agency EPA/600/R-93/116, Office of Research and Development, Washington, D.C.	NA
Regulatory	1993	Occupational Safety and Health Administration, 1993, Better protection against asbestos in the workplace: U.S. Department of Labor Fact Sheet No. OSHA 93-06. Available on the world wide web at http://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=FACT_SHEETS&p_id=144	NA
Regulatory	1995	American Society for Testing and Materials, 1995, Standard test method for microvacuum sampling and indirect analysis of dust by transmission electron microscopy for asbestos structure number concentrations: West Conshohocken, Pa., ASTM 5755-95, 13 p.	NA
Regulatory	1995	International Organization for Standardization, 1995, ISO 10312 Ambient air-determination of asbestos fibres-direct-transfer transmission electron microscopy method (1st ed): Geneve, Switzerland, International Organization for Standardization, 51 p.	The breaking of a mineral along one of its crystallographic directions.
Regulatory	1996	Colorado Air Quality Control Commission, 1996, Part B-emission standards for asbestos, <i>excerpted from</i> Regulation No. 8 "The control of hazardous air pollutants": Colorado Department of Public Health and Environment, 114 p.	NA
Regulatory	1997	Crane, D., 1997, Asbestos in air: Occupational Safety and Health Administration Method # ID-160.	NA

Table 4. Cleavage

Community	Year	Source	Cleavage
Regulatory	1997	NYCRR (New York Code of Rules & Regulations) Title 10 Section 73.1	NA
Regulatory	2001	Environmental Protection Agency Part 763-Asbestos Subpart E--Asbestos-Containing Materials in Schools (7-1-01 Edition)	NA
Regulatory	2001	Environmental Protection Agency Part 763-Asbestos Subpart E--Asbestos-Containing Materials in Schools Appendix A (7-1-01 Edition)	NA
Regulatory	2001	29 CFR 1910.1001	NA
Regulatory	2001	30 CFR 56.5001	NA
Regulatory	2001	17 CCR (California Code of Regulations) 93105	NA
Regulatory	2001	West Virginia Code 16-32-2	NA
Regulatory	2002	OAR (Oregon Administrative Rules) 340-248-0010	NA
Regulatory	2002	105 ILCS (Illinois Compiled Statutes Schools) 105/3	NA

Table 5. Cleavage Fragment

Community	Year	Source	Cleavage Fragment
Industrial	1975	Winson, R.W., 1975, Asbestos, <i>in</i> , Industrial minerals and rocks (nonmetallics other than fuels): New York, N.Y., American Institute of Mining, Metallurgical, and Petroleum Engineers, Inc., p. 379-425.	NA
Industrial	1981	Steel, E. and Wylie, A., 1981, Mineralogical characteristics of asbestos <i>in</i> Riordon, P.H. ed, Geology of Asbestos Deposits, Society of Mining Engineers, p. 93-100.	NA
Industrial	1998	Virta, R.L., 2002, Asbestos: U.S. Geological Survey Open File-Report 02-149, 35 p.	NA
Interdisciplinary	1974	Thompson, C.S., 1974, Discussion of the mineralogy of industrial talcs: U.S. Bureau of Mines Information Circular 8639, p. 22-42.	NA
Interdisciplinary	1978	Zoltai, Tibor, 1978, History of asbestos-related mineralogical terminology: National Bureau of Standards Special Publication 506, p. 1-18.	NA
Interdisciplinary	1979	Chatfield, E.J., 1979, Measurement of asbestos fibres in the workplace and in the general environment <i>in</i> Ledoux, R.L., Mineralogical techniques of asbestos determination: Mineralogical Association of Canada Short Course, v. 4, p. 111-157.	NA
Interdisciplinary	1980	Dixon, W.C., 1980, Applications of optical microscopy in analysis of asbestos and quartz, <i>chap 2 of</i> Dollberg, D.D. and Werstuyft, A.W., eds., Analytical techniques in occupational health chemistry: Washington, D.C., American Chemical Society, p. 13-41.	NA
Interdisciplinary	1980	Clark, R.L., 1982, MSHA standard method for fiber identification by electron microscopy: National Bureau of Standards Special Publication 619, p. 207-210.	NA

Table 5. Cleavage Fragment

Community	Year	Source	Cleavage Fragment
Interdisciplinary	1980	Lee, R.J., Kelly, J.F., and Walker, J.S., 1982, Considerations in the analysis and definition of asbestos using electron microscopy: National Bureau of Standards Special Publication 619, p. 132-137.	NA
Interdisciplinary	1980	Chatfield, E.J. and Lewis, G.M., 1980, Development and application of an analytical technique for measurement of asbestos fibers in vermiculite: Scanning Electron Microscopy, p. 329-340.	NA
Interdisciplinary	1984	National Research Council, 1984, Asbestiform fibers-nonoccupational health risks: Washington D.C., National Academy Press, p. 25-47.	...The strength and flexibility of cleavage fragments are approximately the same as those of single crystals. Cleavage cannot produce the high strength and flexibility of asbestiform fibers.
Interdisciplinary	1984	Cossette, M., 1984, Defining asbestos particulates for monitoring purposes <i>in</i> Levadie, B. ed., Definitions for asbestos and other health-related silicates: ASTM Special Technical Publication 834, p. 5-49.	NA
Interdisciplinary	1984	Ross, M., Kuntze, R.A., and Clifton, R.A., 1984, A definition for asbestos <i>in</i> Levadie, B. ed., Definitions for asbestos and other health-related silicates: ASTM Special Technical Publication 834, pp.139-147.	NA
Interdisciplinary	1988	Skinner, H.C., Ross, M., and Frondel, C., 1988, Asbestos and other fibrous materials: New York, N.Y., Oxford, 204 p.	NA
Interdisciplinary	1990	Mossman, B.T., Bignon, J., Corn, M., Seaton, A., and Gee, J.B.L., 1990, Asbestos-scientific developments and implications for public policy: Science, v. 247, p. 294-301.	NA
Interdisciplinary	2000	The American Heritage® Dictionary of the English Language, Fourth Edition Copyright © 2000 by Houghton Mifflin Company.	NA

Table 5. Cleavage Fragment

Community	Year	Source	Cleavage Fragment
Interdisciplinary	2000	Wylie, A.G., 2000, The habit of asbestiform amphiboles: implications for the analysis of bulk samples <i>in</i> Beard, M.E. and Rooks, H.L., eds., Advances in environmental measurement methods for asbestos: ASTM Special Technical Publication 1342, p. 53-69.	NA
Interdisciplinary	2001	Beard, M.E., Crankshaw, O.S., Ennis, J.T., and Moore, C.E., 2001, Analysis of crayons for asbestos and other fibrous materials, and recommendations for improved analytical definitions: Research Triangle Park, North Carolina, Research Triangle Institute, Center for Environmental Measurements and Quality Assurance, Earth and Mineral Sciences Department, [informal report], 23 p., plus appendices A-H.	Cleavage fragments are mineral particles which are similar to asbestiform fibers but have low aspect ratios.
Interdisciplinary	2001	Nolan, R.P., Langer, A.M., Ross, M., Wicks, F.J., and Martin, R.F., eds., 2001, The health effects of chrysotile asbestos-contribution of science to risk-management decisions: The Canadian Mineralogist Special Publication 5, 304 p.	NA
Medical	1977	Zielhuis, R.L., 1977, Public health risks of exposure to asbestos: Elmsford, N.Y., Pergamon Press Inc., 143 p.	NA
Medical	1979	Langer, A.M., Rohl, A.N., Wolff, M., and Selikoff, I.J., 1979, Asbestos, fibrous minerals and acicular cleavage fragments-Nomenclature and biological properties, <i>in</i> Lemen, R. and Dement, J.M., eds., Dust and disease: Park Forest South, Ill., Pathotox Publishers, p. 1-22.	NA

Table 5. Cleavage Fragment

Community	Year	Source	Cleavage Fragment
Medical	1998	Blake, T., Castranova, V., Schwegler-Berry, D., Baron, P., Deye, G.J., Li, C., and Jones, W., 1998, Effect of fiber length on glass microfiber cytotoxicity: Journal of Toxicology and Environmental Health, v. 54, p. 243-259.	NA
Medical	2001	Ninth Report on Carcinogens, January 2001 http://ehp.niehs.nih.gov/roc/ninth/known/asbestos.pdf	NA
Mineralogical	1914	Dana, E.S., 1914, The system of mineralogy of James Dwight Dana, descriptive mineralogy (6th ed): New York, N.Y., Wiley, p.	NA
Mineralogical	1977	Campbell, W.J., Blake, R.L, Brown, L.L., Cather, E.E., and Sjober, J.J., 1977, Selected silicate minerals and their asbestiform varieties: U.S. Bureau of Mines Information Circular 8751, 56 p.	A fragment produced by the breaking of crystals in directions that are related to the crystal structure and are always parallel to possible crystal faces.
Mineralogical	1979	Campbell, W.J., Steel, E.B., Virta, R.L., and Eisner, M.H., 1979, Relationship of mineral habit to size characteristics for tremolite cleavage fragments and fibers: U.S. Bureau of Mines Report of Investigations 8367, 18 p.	NA
Mineralogical	1980	Bates, R.L., and Jackson, J.A., eds., 1980, Glossary of geology (2d ed.): Falls Church, Va., American Geological Institute, 749 p.	A fragment of a crystal that is bounded by cleavage faces.
Mineralogical	1982	MacKenzie, W.S., Donaldson, C.H., and Guilford, C., 1982, Atlas of igneous rocks and their textures: New York, N.Y., Wiley, p. 20.	NA
Mineralogical	1987	Dorling, M. and Zussman, J., 1987, Characteristics of asbestiform and non-asbestiform calcic amphiboles: Lithos, v. 20, p. 469-489.	NA
Mineralogical	1988	Skinner, H.C., Ross, M., and Frondel, C., 1988, Asbestos and other fibrous materials: New York, N.Y., Oxford, 204 p.	NA

Table 5. Cleavage Fragment

Community	Year	Source	Cleavage Fragment
Mineralogical	1993	Klein, C. and Hurlbut, C.S., Jr., 1993, Manual of mineralogy (after James D. Dana) (21st ed.): New York, N.Y., Wiley, 681 p.	NA
Mineralogical	1993	Veblen, D.R. and Wylie, A.G., 1993, Mineralogy of amphiboles and 1:1 layer silicates in Guthrie Jr., G.D. and Mossman, B.T., eds., Health effects of mineral dusts: Reviews in Mineralogy, v. 28, p. 61-137,	NA
Mineralogical	2001	Virta, R.L., 2001, Some facts about asbestos: U.S. Geological Survey Fact Sheet FS-012-01, 4 p.	NA
Mineralogical	2002	http://webmineral.com/help/Fracture.html	NA
Mineralogical	2002	http://webmineral.com/help/Habits.html	NA
Regulatory	1974	U.S. District Court, district of Minnesota, 5th Division. Supplemental Memorandum. No. 5-72, Civil 19, Appendix 5, May 11, 1974, p. 24	NA
Regulatory	1976	National Institute for Occupational Safety and Health, 1976, Revised recommended asbestos standard: DHEW (NIOSH) Publication No. 77-169, 96 p.	NA
Regulatory	1983	29 CFR 1910.1001	NA
Regulatory	1990	Ohio Administrative Code (OAC) 3745-20-01	NA
Regulatory	1992	Crane, D., 1992, Polarized light microscopy of asbestos: Occupational Safety and Health Administration Method # ID-191.	Mineral particles formed by the comminution of minerals, especially those characterized by relatively parallel sides and moderate aspect ratio.
Regulatory	1992	Occupational Safety and Health Administration, 1992, Preambles IV. Mineralogical Considerations, National Stone Association and American Mining Congress	NA

Table 5. Cleavage Fragment

Community	Year	Source	Cleavage Fragment
Regulatory	1993	Perkins, R.L. and Harvey, B.W., 1993, Method for the determination of asbestos in bulk building materials: U.S. Environmental Protection Agency EPA/600/R-93/116, Office of Research and Development, Washington, D.C.	NA
Regulatory	1993	Occupational Safety and Health Administration, 1993, Better protection against asbestos in the workplace: U.S. Department of Labor Fact Sheet No. OSHA 93-06. Available on the world wide web at http://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=FACT_SHEETS&p_id=144	NA
Regulatory	1995	American Society for Testing and Materials, 1995, Standard test method for microvacuum sampling and indirect analysis of dust by transmission electron microscopy for asbestos structure number concentrations: West Conshohocken, Pa., ASTM 5755-95, 13 p.	NA
Regulatory	1995	International Organization for Standardization, 1995, ISO 10312 Ambient air-determination of asbestos fibres-direct-transfer transmission electron microscopy method (1st ed): Geneve, Switzerland, International Organization for Standardization, 51 p.	A fragment of a crystal that is bounded by cleavage faces.
Regulatory	1996	Colorado Air Quality Control Commission, 1996, Part B-emission standards for asbestos, <i>excerpted from</i> Regulation No. 8 "The control of hazardous air pollutants": Colorado Department of Public Health and Environment, 114 p.	NA

Table 5. Cleavage Fragment

Community	Year	Source	Cleavage Fragment
Regulatory	1997	Crane, D., 1997, Asbestos in air: Occupational Safety and Health Administration Method # ID-160.	Mineral particles formed by the comminution of minerals, especially those characterized by parallel sides and moderate aspect ratio (usually less than 20:1).
Regulatory	1997	NYCRR (New York Code of Rules & Regulations) Title 10 Section 73.1	NA
Regulatory	2001	Environmental Protection Agency Part 763-Asbestos Subpart E--Asbestos-Containing Materials in Schools (7-1-01 Edition)	NA
Regulatory	2001	Environmental Protection Agency Part 763-Asbestos Subpart E--Asbestos-Containing Materials in Schools Appendix A (7-1-01 Edition)	NA
Regulatory	2001	29 CFR 1910.1001	NA
Regulatory	2001	30 CFR 56.5001	NA
Regulatory	2001	17 CCR (California Code of Regulations) 93105	NA
Regulatory	2001	West Virginia Code 16-32-2	NA
Regulatory	2002	OAR (Oregon Administrative Rules) 340-248-0010	NA
Regulatory	2002	105 ILCS (Illinois Compiled Statutes Schools) 105/3	NA

Table 6. Fiber

Community	Year	Source	Fiber
Industrial	1975	Winson, R.W., 1975, Asbestos, <i>in</i> , Industrial minerals and rocks (nonmetallics other than fuels): New York, N.Y., American Institute of Mining, Metallurgical, and Petroleum Engineers, Inc., p. 379-425.	NA
Industrial	1981	Steel, E. and Wylie, A., 1981, Mineralogical characteristics of asbestos <i>in</i> Riordon, P.H. ed, Geology of Asbestos Deposits, Society of Mining Engineers, p. 93-100.	NA
Industrial	1998	Virta, R.L., 2002, Asbestos: U.S. Geological Survey Open File-Report 02-149, 35 p.	NA
Interdisciplinary	1974	Thompson, C.S., 1974, Discussion of the mineralogy of industrial talcs: U.S. Bureau of Mines Information Circular 8639, p. 22-42.	The term "fiber" connotes a greatly elongated particle with threadlike qualities such as high-tensile strength, flexibility, spinability, etc.
Interdisciplinary	1978	Zoltai, Tibor, 1978, History of asbestos-related mineralogical terminology: National Bureau of Standards Special Publication 506, p. 1-18.	An acicular single crystal, or a similarly elongated polycrystalline aggregate, which displays some resemblance to organic fibers.
Interdisciplinary	1979	Chatfield, E.J., 1979, Measurement of asbestos fibres in the workplace and in the general environment <i>in</i> Ledoux, R.L., Mineralogical techniques of asbestos determination: Mineralogical Association of Canada Short Course, v. 4, p. 111-157.	
Interdisciplinary	1980	Dixon, W.C., 1980, Applications of optical microscopy in analysis of asbestos and quartz, <i>chap 2 of</i> Dollberg, D.D. and Werstuyft, A.W., eds., Analytical techniques in occupational health chemistry: Washington, D.C., American Chemical Society, p. 13-41.	NA
Interdisciplinary	1980	Clark, R.L., 1982, MSHA standard method for fiber identification by electron microscopy: National Bureau of Standards Special Publication 619, p. 207-210.	[Author uses Code of Federal Regulations] "fiber" is defined as any particulate with a three to one or greater length to width aspect ratio, and a length of five micrometers or longer.

Table 6. Fiber

Community	Year	Source	Fiber
Interdisciplinary	1980	Lee, R.J., Kelly, J.F., and Walker, J.S., 1982, Considerations in the analysis and definition of asbestos using electron microscopy: National Bureau of Standards Special Publication 619, p. 132-137.	NA
Interdisciplinary	1980	Chatfield, E.J. and Lewis, G.M., 1980, Development and application of an analytical technique for measurement of asbestos fibers in vermiculite: Scanning Electron Microscopy, p. 329-340.	Fibers are defined as all fragments having aspect ratios greater than 3:1, with lengths exceeding 5 um and having diameters smaller than 3 um.
Interdisciplinary	1984	National Research Council, 1984, Asbestiform fibers-nonoccupational health risks: Washington D.C., National Academy Press, p. 25-47.	The term MINERAL FIBERS has traditionally referred to crystals whose appearance and properties resembled organic fibers, such as hair and cotton. In some recent literature, however, the term sometimes refers only to the appearance of the material, and there can be confusion about whether particular properties are also implied.
Interdisciplinary	1984	Cossette, M., 1984, Defining asbestos particulates for monitoring purposes <i>in</i> Levadie, B. ed., Definitions for asbestos and other health-related silicates: ASTM Special Technical Publication 834, p. 5-49.	NA
Interdisciplinary	1984	Ross, M., Kuntze, R.A., and Clifton, R.A., 1984, A definition for asbestos <i>in</i> Levadie, B. ed., Definitions for asbestos and other health-related silicates: ASTM Special Technical Publication 834, pp.139-147.	NA
Interdisciplinary	1988	Skinner, H.C., Ross, M., and Frondel, C., 1988, Asbestos and other fibrous materials: New York, N.Y., Oxford, 204 p.	...inorganic fibers in a general sense: as small elongate solid objects composed of any compound or element; usually nonbiologic in origin and often exhibiting distinctive physical, especially mechanical, properties. Inorganic fibers can occur naturally, that is, as mineral fibers or can be produced synthetically.
Interdisciplinary	1990	Mossman, B.T., Bignon, J., Corn, M., Seaton, A., and Gee, J.B.L., 1990, Asbestos-scientific developments and implications for public policy: Science, v. 247, p. 294-301.	NA

Table 6. Fiber

Community	Year	Source	Fiber
Interdisciplinary	2000	The American Heritage® Dictionary of the English Language, Fourth Edition Copyright © 2000 by Houghton Mifflin Company.	NA
Interdisciplinary	2000	Wylie, A.G., 2000, The habit of asbestiform amphiboles: implications for the analysis of bulk samples <i>in</i> Beard, M.E. and Rooks, H.L, eds., Advances in environmental measurement methods for asbestos: ASTM Special Technical Publication 1342, p. 53-69.	NA
Interdisciplinary	2001	Beard, M.E., Crankshaw, O.S., Ennis, J.T., and Moore, C.E., 2001, Analysis of crayons for asbestos and other fibrous materials, and recommendations for improved analytical definitions: Research Triangle Park, North Carolina, Research Triangle Institute, Center for Environmental Measurements and Quality Assurance, Earth and Mineral Sciences Department, [informal report], 23 p., plus appendices A-H.	NA
Interdisciplinary	2001	Nolan, R.P., Langer, A.M., Ross, M., Wicks, F.J., and Martin, R.F., eds., 2001, The health effects of chrysotile asbestos-contribution of science to risk-management decisions: The Canadian Mineralogist Special Publication 5, 304 p.	NA
Medical	1977	Zielhuis, R.L., 1977, Public health risks of exposure to asbestos: Elmsford, N.Y., Pergamon Press Inc., 143 p.	NA
Medical	1979	Langer, A.M., Rohl, A.N., Wolff, M., and Selikoff, I.J., 1979, Asbestos, fibrous minerals and acicular cleavage fragments-Nomenclature and biological properties, <i>in</i> Lemen, R. and Dement, J.M., eds., Dust and disease: Park Forest South, Ill., Pathotox Publishers, p. 1-22.	NA

Table 6. Fiber

Community	Year	Source	Fiber
Medical	1998	Blake, T., Castranova, V., Schwegler-Berry, D., Baron, P., Deye, G.J., Li, C., and Jones, W., 1998, Effect of fiber length on glass microfiber cytotoxicity: Journal of Toxicology and Environmental Health, v. 54, p. 243-259.	NA
Medical	2001	Ninth Report on Carcinogens, January 2001 http://ehp.niehs.nih.gov/roc/ninth/known/asbestos.pdf	NA
Mineralogical	1914	Dana, E.S., 1914, The system of mineralogy of James Dwight Dana, descriptive mineralogy (6th ed): New York, N.Y., Wiley, p.	NA
Mineralogical	1977	Campbell, W.J., Blake, R.L, Brown, L.L., Cather, E.E., and Sjober, J.J., 1977, Selected silicate minerals and their asbestiform varieties: U.S. Bureau of Mines Information Circular 8751, 56 p.	(mineral fiber) The smallest elongated crystalline unit that can be separated from a bundle or appears to have grown individually in that shape, and that exhibits a resemblance to organic fibers. (Examples: fiber bundles, chrysotile, and crocidolite; individual fibers, epsomite and millerite.)
Mineralogical	1979	Campbell, W.J., Steel, E.B., Virta, R.L., and Eisner, M.H., 1979, Relationship of mineral habit to size characteristics for tremolite cleavage fragments and fibers: U.S. Bureau of Mines Report of Investigations 8367, 18 p.	NA
Mineralogical	1980	Bates, R.L., and Jackson, J.A., eds., 1980, Glossary of geology (2d ed.): Falls Church, Va., American Geological Institute, 749 p.	An elongated, tapering, thick-walled strengthening cell occurring in various parts of vascular plants (Esau, 1953).
Mineralogical	1982	MacKenzie, W.S., Donaldson, C.H., and Guilford, C., 1982, Atlas of igneous rocks and their textures: New York, N.Y., Wiley, p. 20.	NA
Mineralogical	1987	Dorling, M. and Zussman, J., 1987, Characteristics of asbestiform and non-asbestiform calcic amphiboles: Lithos, v. 20, p. 469-489.	NA

Table 6. Fiber

Community	Year	Source	Fiber
Mineralogical	1988	Skinner, H.C., Ross, M., and Frondel, C., 1988, Asbestos and other fibrous materials: New York, N.Y., Oxford, 204 p.	A long, thin thread or threadlike solid with distinctive elongate shape that may be natural or synthetic and organic or inorganic in composition. The properties of flexibility and toughness are also implied, especially to the layperson, but are not essential to the definition. The dimensions of an object called a fiber are usually unspecified and may range from the visible (diameter about a millimeter, and a length many times the thickness) to a particle that can be observed only with the aid of a light or an electron microscope (magnification greater than X50,000). The physical dimensions of vegetable fibers such as flax, hemp, or cotton; animal fibers such as wood, silk, and hair; mineral fibers, such as asbestos; and synthetic fibers such as nylon and glass usually have diameters between 1 and 500 micrometers and lengths between 10 and 1000 micrometers. Inorganic fibers may be flexible and elastic or stiff and brittle, and they commonly occur as aggregates or fibrous bundles. Most mineralogists apply the term when the aspect ratio of a mineral sample, individual or aggregate, is at least 10.
Mineralogical	1993	Klein, C. and Hurlbut, C.S., Jr., 1993, Manual of mineralogy (after James D. Dana) (21st ed.): New York, N.Y., Wiley, 681 p.	NA
Mineralogical	1993	Veblen, D.R. and Wylie, A.G., 1993, Mineralogy of amphiboles and 1:1 layer silicates in Guthrie Jr., G.D. and Mossman, B.T., eds., Health effects of mineral dusts: Reviews in Mineralogy, v. 28, p. 61-137,	NA
Mineralogical	2001	Virta, R.L., 2001, Some facts about asbestos: U.S. Geological Survey Fact Sheet FS-012-01, 4 p.	NA
Mineralogical	2002	http://webmineral.com/help/Fracture.html	NA
Mineralogical	2002	http://webmineral.com/help/Habits.html	NA
Regulatory	1974	U.S. District Court, district of Minnesota, 5th Division. Supplemental Memorandum. No. 5-72, Civil 19, Appendix 5, May 11, 1974, p. 24	...a mineral which is at least three times as long as it is wide

Table 6. Fiber

Community	Year	Source	Fiber
Regulatory	1976	National Institute for Occupational Safety and Health, 1976, Revised recommended asbestos standard: DHEW (NIOSH) Publication No. 77-169, 96 p.	Asbestos fibers are defined as those particles with a length greater than 5 um and a length-to-diameter ratio of 3:1, or greater.
Regulatory	1983	29 CFR 1910.1001	(2) "Asbestos fibers" means asbestos fibers longer than 5 micrometers.
Regulatory	1990	Ohio Administrative Code (OAC) 3745-20-01	NA
Regulatory	1992	Crane, D., 1992, Polarized light microscopy of asbestos: Occupational Safety and Health Administration Method # ID-191.	A particle longer than or equal to 5 um with a length to width ratio greater than or equal to 3:1. This may include cleavage fragments.
Regulatory	1992	Occupational Safety and Health Administration, 1992, Preambles IV. Mineralogical Considerations, National Stone Association and American Mining Congress	NA
Regulatory	1993	Perkins, R.L. and Harvey, B.W., 1993, Method for the determination of asbestos in bulk building materials: U.S. Environmental Protection Agency EPA/600/R-93/116, Office of Research and Development, Washington, D.C.	With reference to asbestiform morphology, a structure consisting of one or more fibrils.
Regulatory	1993	Occupational Safety and Health Administration, 1993, Better protection against asbestos in the workplace: U.S. Department of Labor Fact Sheet No. OSHA 93-06. Available on the world wide web at http://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=FACT_SHEETS&p_id=144	NA
Regulatory	1995	American Society for Testing and Materials, 1995, Standard test method for microvacuum sampling and indirect analysis of dust by transmission electron microscopy for asbestos structure number concentrations: West Conshohocken, Pa., ASTM 5755-95, 13 p.	a structure having a minimum length of 0.5 um, an aspect ratio of 5:1 or greater, and substantially parallel sides

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Community	Year	Source	Fiber
Regulatory	1995	International Organization for Standardization, 1995, ISO 10312 Ambient air-determination of asbestos fibres-direct-transfer transmission electron microscopy method (1st ed): Geneve, Switzerland, International Organization for Standardization, 51 p.	(fibre) An elongated particle which has parallel or stepped sides. For the purposes of this International Standard, a fibre is defined to have an aspect ratio equal to or greater than 5:1 and a minimum length of 0.5 um.
Regulatory	1996	Colorado Air Quality Control Commission, 1996, Part B-emission standards for asbestos, <i>excerpted from</i> Regulation No. 8 "The control of hazardous air pollutants": Colorado Department of Public Health and Environment, 114 p.	NA
Regulatory	1997	Crane, D., 1997, Asbestos in air: Occupational Safety and Health Administration Method # ID-160.	A particle that is 5 um or longer, with a length-to-width ratio of 3 to 1 or longer.
Regulatory	1997	NYCRR (New York Code of Rules & Regulations) Title 10 Section 73.1	NA
Regulatory	2001	Environmental Protection Agency Part 763-Asbestos Subpart E--Asbestos-Containing Materials in Schools (7-1-01 Edition)	NA
Regulatory	2001	Environmental Protection Agency Part 763-Asbestos Subpart E--Asbestos-Containing Materials in Schools Appendix A (7-1-01 Edition)	A structure greater than or equal to 0.5 um in length with an aspect ratio (length to width) of 5:1 or greater and having substantially parallel sides.
Regulatory	2001	29 CFR 1910.1001	Fiber means a particulate form of asbestos 5 micrometers or longer, with a length-to-diameter ratio of at least 3 to 1.
Regulatory	2001	30 CFR 56.5001	NA
Regulatory	2001	17 CCR (California Code of Regulations) 93105	NA
Regulatory	2001	West Virginia Code 16-32-2	NA
Regulatory	2002	OAR (Oregon Administrative Rules) 340-248-0010	NA
Regulatory	2002	105 ILCS (Illinois Compiled Statutes Schools) 105/3	NA

Table 7. Fibril

Community	Year	Source	Fibril
Industrial	1975	Winson, R.W., 1975, Asbestos, <i>in</i> , Industrial minerals and rocks (nonmetallics other than fuels): New York, N.Y., American Institute of Mining, Metallurgical, and Petroleum Engineers, Inc., p. 379-425.	NA
Industrial	1981	Steel, E. and Wylie, A., 1981, Mineralogical characteristics of asbestos <i>in</i> Riordon, P.H. ed, Geology of Asbestos Deposits, Society of Mining Engineers, p. 93-100.	A fibril is single or twinned crystal with a very small width, generally less than 0.5 um, and an extremely high aspect ratio; bundle of fibrils may have lengths reaching into the cm.
Industrial	1998	Virta, R.L., 2002, Asbestos: U.S. Geological Survey Open File-Report 02-149, 35 p.	NA
Interdisciplinary	1974	Thompson, C.S., 1974, Discussion of the mineralogy of industrial talcs: U.S. Bureau of Mines Information Circular 8639, p. 22-42.	NA
Interdisciplinary	1978	Zoltai, Tibor, 1978, History of asbestos-related mineralogical terminology: National Bureau of Standards Special Publication 506, p. 1-18.	NA
Interdisciplinary	1979	Chatfield, E.J., 1979, Measurement of asbestos fibres in the workplace and in the general environment <i>in</i> Ledoux, R.L., Mineralogical techniques of asbestos determination: Mineralogical Association of Canada Short Course, v. 4, p. 111-157.	NA
Interdisciplinary	1980	Dixon, W.C., 1980, Applications of optical microscopy in analysis of asbestos and quartz, <i>chap 2 of</i> Dollberg, D.D. and Werstuyft, A.W., eds., Analytical techniques in occupational health chemistry: Washington, D.C., American Chemical Society, p. 13-41.	NA

Table 7. Fibril

Community	Year	Source	Fibril
Interdisciplinary	1980	Clark, R.L., 1982, MSHA standard method for fiber identification by electron microscopy: National Bureau of Standards Special Publication 619, p. 207-210.	NA
Interdisciplinary	1980	Lee, R.J., Kelly, J.F., and Walker, J.S., 1982, Considerations in the analysis and definition of asbestos using electron microscopy: National Bureau of Standards Special Publication 619, p. 132-137.	NA
Interdisciplinary	1980	Chatfield, E.J. and Lewis, G.M., 1980, Development and application of an analytical technique for measurement of asbestos fibers in vermiculite: Scanning Electron Microscopy, p. 329-340.	NA
Interdisciplinary	1984	National Research Council, 1984, Asbestiform fibers-nonoccupational health risks: Washington D.C., National Academy Press, p. 25-47.	NA
Interdisciplinary	1984	Cossette, M., 1984, Defining asbestos particulates for monitoring purposes <i>in</i> Levadie, B. ed., Definitions for asbestos and other health-related silicates: ASTM Special Technical Publication 834, p. 5-49.	...a single crystal in the form of a fiber
Interdisciplinary	1984	Ross, M., Kuntze, R.A., and Clifton, R.A., 1984, A definition for asbestos <i>in</i> Levadie, B. ed., Definitions for asbestos and other health-related silicates: ASTM Special Technical Publication 834, pp.139-147.	NA

Table 7. Fibril

Community	Year	Source	Fibril
Interdisciplinary	1988	Skinner, H.C., Ross, M., and Frondel, C., 1988, Asbestos and other fibrous materials: New York, N.Y., Oxford, 204 p.	A small fiber or the subdivision of a fiber (OED); also a small thread or fiber (WEB). The term is usually employed to describe an elongate unit whose dimensions are smaller than fiber (fine-fibrous) and may be used to designate one member of a fibrous mineral aggregate, regardless of the size of the individual particles or the aggregate. In the latter usage, the implication is that a fibril is the smallest unit that expresses the characteristics of a fiber or fibrous mass, and usually that the fibril is separable by subdivision parallel to the length of the fiber. For example, chrysotile asbestos could theoretically be disaggregated to tubular individual fibrils with diameters in the range of 200 Å. The term fibril therefore has an ultimate lower limit. Fibril is also related to the term polymer, which is defined as a chemical compound or mixture of compounds formed by polymerization and consisting of essentially repeating structural units, usually producing giant chainlike macromolecules. Such a molecule is characterized by highly asymmetric geometry and anisotropic properties. If a solid is formed from polymers, a fibril would be the smallest polymeric unit.
Interdisciplinary	1990	Mossman, B.T., Bignon, J., Corn, M., Seaton, A., and Gee, J.B.L., 1990, Asbestos-scientific developments and implications for public policy: Science, v. 247, p. 294-301.	NA
Interdisciplinary	2000	The American Heritage® Dictionary of the English Language, Fourth Edition Copyright © 2000 by Houghton Mifflin Company.	1. A small slender fiber or filament
Interdisciplinary	2000	Wylie, A.G., 2000, The habit of asbestiform amphiboles: implications for the analysis of bulk samples in Beard, M.E. and Rooks, H.L, eds., Advances in environmental measurement methods for asbestos: ASTM Special Technical Publication 1342, p. 53-69.	NA

Table 7. Fibril

Community	Year	Source	Fibril
Interdisciplinary	2001	Beard, M.E., Crankshaw, O.S., Ennis, J.T., and Moore, C.E., 2001, Analysis of crayons for asbestos and other fibrous materials, and recommendations for improved analytical definitions: Research Triangle Park, North Carolina, Research Triangle Institute, Center for Environmental Measurements and Quality Assurance, Earth and Mineral Sciences Department, [informal report], 23 p., plus appendices A-H.	NA
Interdisciplinary	2001	Nolan, R.P., Langer, A.M., Ross, M., Wicks, F.J., and Martin, R.F., eds., 2001, The health effects of chrysotile asbestos-contribution of science to risk-management decisions: The Canadian Mineralogist Special Publication 5, 304 p.	NA
Medical	1977	Zielhuis, R.L., 1977, Public health risks of exposure to asbestos: Elmsford, N.Y., Pergamon Press Inc., 143 p.	Chrysotile having a high magnesium content can be described as a sheet silicate in which the flat structure is rolled about an axis to form a narrow tube (termed fibril) possessing both strength and flexibility.
Medical	1979	Langer, A.M., Rohl, A.N., Wolff, M., and Selikoff, I.J., 1979, Asbestos, fibrous minerals and acicular cleavage fragments-Nomenclature and biological properties, <i>in</i> Lemen, R. and Dement, J.M., eds., Dust and disease: Park Forest South, Ill., Pathotox Publishers, p. 1-22.	NA
Medical	1998	Blake, T., Castranova, V., Schwegler-Berry, D., Baron, P., Deye, G.J., Li, C., and Jones, W., 1998, Effect of fiber length on glass microfiber cytotoxicity: Journal of Toxicology and Environmental Health, v. 54, p. 243-259.	NA
Medical	2001	Ninth Report on Carcinogens, January 2001 http://ehp.niehs.nih.gov/roc/ninth/known/asbestos.pdf	NA

Table 7. Fibril

Community	Year	Source	Fibril
Mineralogical	1914	Dana, E.S., 1914, The system of mineralogy of James Dwight Dana, descriptive mineralogy (6th ed): New York, N.Y., Wiley, p.	NA
Mineralogical	1977	Campbell, W.J., Blake, R.L, Brown, L.L., Cather, E.E., and Sjober, J.J., 1977, Selected silicate minerals and their asbestiform varieties: U.S. Bureau of Mines Information Circular 8751, 56 p.	A single fiber, which cannot be separated into smaller components without losing its fibrous properties or appearances.
Mineralogical	1979	Campbell, W.J., Steel, E.B., Virta, R.L., and Eisner, M.H., 1979, Relationship of mineral habit to size characteristics for tremolite cleavage fragments and fibers: U.S. Bureau of Mines Report of Investigations 8367, 18 p.	NA
Mineralogical	1980	Bates, R.L., and Jackson, J.A., eds., 1980, Glossary of geology (2d ed.): Falls Church, Va., American Geological Institute, 749 p.	NA
Mineralogical	1982	MacKenzie, W.S., Donaldson, C.H., and Guilford, C., 1982, Atlas of igneous rocks and their textures: New York, N.Y., Wiley, p. 20.	NA
Mineralogical	1987	Dorling, M. and Zussman, J., 1987, Characteristics of asbestiform and non-asbestiform calcic amphiboles: Lithos, v. 20, p. 469-489.	NA
Mineralogical	1988	Skinner, H.C., Ross, M., and Frondel, C., 1988, Asbestos and other fibrous materials: New York, N.Y., Oxford, 204 p.	NA
Mineralogical	1993	Klein, C. and Hurlbut, C.S., Jr., 1993, Manual of mineralogy (after James D. Dana) (21st ed.): New York, N.Y., Wiley, 681 p.	NA

Table 7. Fibril

Community	Year	Source	Fibril
Mineralogical	1993	Veblen, D.R. and Wylie, A.G., 1993, Mineralogy of amphiboles and 1:1 layer silicates in Guthrie Jr., G.D. and Mossman, B.T., eds., Health effects of mineral dusts: Reviews in Mineralogy, v. 28, p. 61-137,	Fibrils are single, elementary fibers that have very small width.
Mineralogical	2001	Virta, R.L., 2001, Some facts about asbestos: U.S. Geological Survey Fact Sheet FS-012-01, 4 p.	NA
Mineralogical	2002	http://webmineral.com/help/Fracture.html	NA
Mineralogical	2002	http://webmineral.com/help/Habits.html	NA
Regulatory	1974	U.S. District Court, district of Minnesota, 5th Division. Supplemental Memorandum. No. 5-72, Civil 19, Appendix 5, May 11, 1974, p. 24	NA
Regulatory	1976	National Institute for Occupational Safety and Health, 1976, Revised recommended asbestos standard: DHEW (NIOSH) Publication No. 77-169, 96 p.	NA
Regulatory	1983	29 CFR 1910.1001	NA
Regulatory	1990	Ohio Administrative Code (OAC) 3745-20-01	NA
Regulatory	1992	Crane, D., 1992, Polarized light microscopy of asbestos: Occupational Safety and Health Administration Method # ID-191.	NA
Regulatory	1992	Occupational Safety and Health Administration, 1992, Preambles IV. Mineralogical Considerations, National Stone Association and American Mining Congress	NA
Regulatory	1993	Perkins, R.L. and Harvey, B.W., 1993, Method for the determination of asbestos in bulk building materials: U.S. Environmental Protection Agency EPA/600/R-93/116, Office of Research and Development, Washington, D.C.	The individual unit of structure of fibers.

Table 7. Fibril

Community	Year	Source	Fibril
Regulatory	1993	Occupational Safety and Health Administration, 1993, Better protection against asbestos in the workplace: U.S. Department of Labor Fact Sheet No. OSHA 93-06. Available on the world wide web at http://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=FACT_SHEETS&p_id=144	NA
Regulatory	1995	American Society for Testing and Materials, 1995, Standard test method for microvacuum sampling and indirect analysis of dust by transmission electron microscopy for asbestos structure number concentrations: West Conshohocken, Pa., ASTM 5755-95, 13 p.	a single fiber that cannot be separated into smaller components without losing its fibrous properties or appearance.
Regulatory	1995	International Organization for Standardization, 1995, ISO 10312 Ambient air-determination of asbestos fibres-direct-transfer transmission electron microscopy method (1st ed): Geneve, Switzerland, International Organization for Standardization, 51 p.	A single fibre of asbestos, which cannot be further separated longitudinally into smaller components without losing its fibrous properties or appearances.
Regulatory	1996	Colorado Air Quality Control Commission, 1996, Part B-emission standards for asbestos, <i>excerpted from</i> Regulation No. 8 "The control of hazardous air pollutants": Colorado Department of Public Health and Environment, 114 p.	NA
Regulatory	1997	Crane, D., 1997, Asbestos in air: Occupational Safety and Health Administration Method # ID-160.	NA
Regulatory	1997	NYCRR (New York Code of Rules & Regulations) Title 10 Section 73.1	NA

Table 7. Fibril

Community	Year	Source	Fibril
Regulatory	2001	Environmental Protection Agency Part 763-Asbestos Subpart E--Asbestos-Containing Materials in Schools (7-1-01 Edition)	NA
Regulatory	2001	Environmental Protection Agency Part 763-Asbestos Subpart E--Asbestos-Containing Materials in Schools Appendix A (7-1-01 Edition)	NA
Regulatory	2001	29 CFR 1910.1001	NA
Regulatory	2001	30 CFR 56.5001	NA
Regulatory	2001	17 CCR (California Code of Regulations) 93105	NA
Regulatory	2001	West Virginia Code 16-32-2	NA
Regulatory	2002	OAR (Oregon Administrative Rules) 340-248-0010	NA
Regulatory	2002	105 ILCS (Illinois Compiled Statutes Schools) 105/3	NA

Table 8. Fibrous

Community	Year	Source	Fibrous
Industrial	1975	Winson, R.W., 1975, Asbestos, <i>in</i> , Industrial minerals and rocks (nonmetallics other than fuels): New York, N.Y., American Institute of Mining, Metallurgical, and Petroleum Engineers, Inc., p. 379-425.	NA
Industrial	1981	Steel, E. and Wylie, A., 1981, Mineralogical characteristics of asbestos <i>in</i> Riordon, P.H. ed, Geology of Asbestos Deposits, Society of Mining Engineers, p. 93-100.	NA
Industrial	1998	Virta, R.L., 2002, Asbestos: U.S. Geological Survey Open File-Report 02-149, 35 p.	NA
Interdisciplinary	1974	Thompson, C.S., 1974, Discussion of the mineralogy of industrial talcs: U.S. Bureau of Mines Information Circular 8639, p. 22-42.	NA
Interdisciplinary	1978	Zoltai, Tibor, 1978, History of asbestos-related mineralogical terminology: National Bureau of Standards Special Publication 506, p. 1-18.	The descriptive term used for a mineral which is composed of parallel, radiating or interlaced aggregates of fibers, from which the fibers are usually separable.
Interdisciplinary	1979	Chatfield, E.J., 1979, Measurement of asbestos fibres in the workplace and in the general environment <i>in</i> Ledoux, R.L., Mineralogical techniques of asbestos determination: Mineralogical Association of Canada Short Course, v. 4, p. 111-157.	NA
Interdisciplinary	1980	Dixon, W.C., 1980, Applications of optical microscopy in analysis of asbestos and quartz, <i>chap 2 of</i> Dollberg, D.D. and Werstuyft, A.W., eds., Analytical techniques in occupational health chemistry: Washington, D.C., American Chemical Society, p. 13-41.	NA

Table 8. Fibrous

Community	Year	Source	Fibrous
Interdisciplinary	1980	Clark, R.L., 1982, MSHA standard method for fiber identification by electron microscopy: National Bureau of Standards Special Publication 619, p. 207-210.	NA
Interdisciplinary	1980	Lee, R.J., Kelly, J.F., and Walker, J.S., 1982, Considerations in the analysis and definition of asbestos using electron microscopy: National Bureau of Standards Special Publication 619, p. 132-137.	NA
Interdisciplinary	1980	Chatfield, E.J. and Lewis, G.M., 1980, Development and application of an analytical technique for measurement of asbestos fibers in vermiculite: Scanning Electron Microscopy, p. 329-340.	NA
Interdisciplinary	1984	National Research Council, 1984, Asbestiform fibers-nonoccupational health risks: Washington D.C., National Academy Press, p. 25-47.	FIBROUS refers to (1) single crystals that resemble organic fibers such as hair or cotton and (2) large crystals or crystalline aggregates that look like they are composed of fibers (i.e., long, thin, needlelike elements) (Dana and Ford, 1932). The apparent fibers do not need to be separable. If the fibers are separable and are strong and flexible, they are ASBESTIFORM. If they have the normal strength and brittleness of the mineral, they are ACICULAR. If the apparent fibers are not separable, the specimen may be a single crystal or a multiple (polycrystalline) aggregate displaying a fibrous pattern (resulting, for example, from striation or pseudomorphic replacement of an initially fibrous mineral).
Interdisciplinary	1984	Cossette, M., 1984, Defining asbestos particulates for monitoring purposes <i>in</i> Levadie, B. ed., Definitions for asbestos and other health-related silicates: ASTM Special Technical Publication 834, p. 5-49.	fibrous particulate-fibers, fiber fragments, and fiber agglomerates
Interdisciplinary	1984	Ross, M., Kuntze, R.A., and Clifton, R.A., 1984, A definition for asbestos <i>in</i> Levadie, B. ed., Definitions for asbestos and other health-related silicates: ASTM Special Technical Publication 834, pp.139-147.	NA

Table 8. Fibrous

Community	Year	Source	Fibrous
Interdisciplinary	1988	Skinner, H.C., Ross, M., and Frondel, C., 1988, Asbestos and other fibrous materials: New York, N.Y., Oxford, 204 p.	Full of fibers, or formed of fibers (OED), with dimensions unspecified but implied, by comparison, to be similar to the natural materials thread and hair (see Fiber). Aggregates of any size of individual fibers may form relatively thick fibrous bundles, thus becoming visible to the naked eye.
Interdisciplinary	1990	Mossman, B.T., Bignon, J., Corn, M., Seaton, A., and Gee, J.B.L., 1990, Asbestos-scientific developments and implications for public policy: Science, v. 247, p. 294-301.	NA
Interdisciplinary	2000	The American Heritage® Dictionary of the English Language, Fourth Edition Copyright © 2000 by Houghton Mifflin Company.	1. Having, consisting of, or resembling fibers.
Interdisciplinary	2000	Wylie, A.G., 2000, The habit of asbestiform amphiboles: implications for the analysis of bulk samples <i>in</i> Beard, M.E. and Rooks, H.L., eds., Advances in environmental measurement methods for asbestos: ASTM Special Technical Publication 1342, p. 53-69.	NA
Interdisciplinary	2001	Beard, M.E., Crankshaw, O.S., Ennis, J.T., and Moore, C.E., 2001, Analysis of crayons for asbestos and other fibrous materials, and recommendations for improved analytical definitions: Research Triangle Park, North Carolina, Research Triangle Institute, Center for Environmental Measurements and Quality Assurance, Earth and Mineral Sciences Department, [informal report], 23 p., plus appendices A-H.	NA
Interdisciplinary	2001	Nolan, R.P., Langer, A.M., Ross, M., Wicks, F.J., and Martin, R.F., eds., 2001, The health effects of chrysotile asbestos-contribution of science to risk-management decisions: The Canadian Mineralogist Special Publication 5, 304 p.	NA

Table 8. Fibrous

Community	Year	Source	Fibrous
Medical	1977	Zielhuis, R.L., 1977, Public health risks of exposure to asbestos: Elmsford, N.Y., Pergamon Press Inc., 143 p.	NA
Medical	1979	Langer, A.M., Rohl, A.N., Wolff, M., and Selikoff, I.J., 1979, Asbestos, fibrous minerals and acicular cleavage fragments- Nomenclature and biological properties, <i>in</i> Lemen, R. and Dement, J.M., eds., Dust and disease: Park Forest South, Ill., Pathotox Publishers, p. 1-22.	NA
Medical	1998	Blake, T., Castranova, V., Schwegler-Berry, D., Baron, P., Deye, G.J., Li, C., and Jones, W., 1998, Effect of fiber length on glass microfiber cytotoxicity: Journal of Toxicology and Environmental Health, v. 54, p. 243-259.	NA
Medical	2001	Ninth Report on Carcinogens, January 2001 http://ehp.niehs.nih.gov/roc/ninth/known/asbestos.pdf	NA
Mineralogical	1914	Dana, E.S., 1914, The system of mineralogy of James Dwight Dana, descriptive mineralogy (6th ed): New York, N.Y., Wiley, p.	NA
Mineralogical	1977	Campbell, W.J., Blake, R.L., Brown, L.L., Cather, E.E., and Sjober, J.J., 1977, Selected silicate minerals and their asbestiform varieties: U.S. Bureau of Mines Information Circular 8751, 56 p.	The occurrence of a mineral in bundles of fibers, resembling organic fibers in texture, from which the fibers can usually be separated (for example, satin-spar and chrysotile).
Mineralogical	1979	Campbell, W.J., Steel, E.B., Virta, R.L., and Eisner, M.H., 1979, Relationship of mineral habit to size characteristics for tremolite cleavage fragments and fibers: U.S. Bureau of Mines Report of Investigations 8367, 18 p.	The term fibrous is used in a general mineralogical way to describe any aggregates of grains that crystallize in a needlelike habit and appear to be composed of fibers.
Mineralogical	1980	Bates, R.L., and Jackson, J.A., eds., 1980, Glossary of geology (2d ed.): Falls Church, Va., American Geological Institute, 749 p.	Said of the habit of a mineral, and of the mineral itself (e.g. asbestos), that crystallizes in elongated thin, needle-like grains, or fibers.

Table 8. Fibrous

Community	Year	Source	Fibrous
Mineralogical	1982	MacKenzie, W.S., Donaldson, C.H., and Guilford, C., 1982, Atlas of igneous rocks and their textures: New York, N.Y., Wiley, p. 20.	NA
Mineralogical	1987	Dorling, M. and Zussman, J., 1987, Characteristics of asbestiform and non-asbestiform calcic amphiboles: Lithos, v. 20, p. 469-489.	NA
Mineralogical	1988	Skinner, H.C., Ross, M., and Frondel, C., 1988, Asbestos and other fibrous materials: New York, N.Y., Oxford, 204 p.	NA
Mineralogical	1993	Klein, C. and Hurlbut, C.S., Jr., 1993, Manual of mineralogy (after James D. Dana) (21st ed.): New York, N.Y., Wiley, 681 p.	Aggregate of slender fibers, parallel or radiating
Mineralogical	1993	Veblen, D.R. and Wylie, A.G., 1993, Mineralogy of amphiboles and 1:1 layer silicates in Guthrie Jr., G.D. and Mossman, B.T., eds., Health effects of mineral dusts: Reviews in Mineralogy, v. 28, p. 61-137,	NA
Mineralogical	2001	Virta, R.L., 2001, Some facts about asbestos: U.S. Geological Survey Fact Sheet FS-012-01, 4 p.	When the length is extremely long compared with the width, the crystals are called asbestiform or fibrous.
Mineralogical	2002	http://webmineral.com/help/Fracture.html	[About fibrous fracture] Thin, elongated fractures produced by crystal forms or intersecting cleavages (e.g. asbestos).
Mineralogical	2002	http://webmineral.com/help/Habits.html	[About mineral habit] Crystals made up of fibers.
Regulatory	1974	U.S. District Court, district of Minnesota, 5th Division. Supplemental Memorandum. No. 5-72, Civil 19, Appendix 5, May 11, 1974, p. 24	NA
Regulatory	1976	National Institute for Occupational Safety and Health, 1976, Revised recommended asbestos standard: DHEW (NIOSH) Publication No. 77-169, 96 p.	NA
Regulatory	1983	29 CFR 1910.1001	NA
Regulatory	1990	Ohio Administrative Code (OAC) 3745-20-01	NA

Table 8. Fibrous

Community	Year	Source	Fibrous
Regulatory	1992	Crane, D., 1992, Polarized light microscopy of asbestos: Occupational Safety and Health Administration Method # ID-191.	NA
Regulatory	1992	Occupational Safety and Health Administration, 1992, Preambles IV. Mineralogical Considerations, National Stone Association and American Mining Congress	NA
Regulatory	1993	Perkins, R.L. and Harvey, B.W., 1993, Method for the determination of asbestos in bulk building materials: U.S. Environmental Protection Agency EPA/600/R-93/116, Office of Research and Development, Washington, D.C.	NA
Regulatory	1993	Occupational Safety and Health Administration, 1993, Better protection against asbestos in the workplace: U.S. Department of Labor Fact Sheet No. OSHA 93-06. Available on the world wide web at http://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=FACT_SHEETS&p_id=144	NA
Regulatory	1995	American Society for Testing and Materials, 1995, Standard test method for microvacuum sampling and indirect analysis of dust by transmission electron microscopy for asbestos structure number concentrations: West Conshohocken, Pa., ASTM 5755-95, 13 p.	...of a mineral composed of parallel, radiating, or interlaced aggregates of fibers, from which the fibers are sometimes separable. That is, the crystalline aggregate may be referred to as fibrous even if it is not composed of separable fibers, but has that distinct appearance. The term fibrous is used in a general mineralogical way to describe aggregates of grains that crystallize in a needle-like habit and appear to be composed of fibers. Fibrous has a much more general meaning than asbestos. While it is correct that all asbestos minerals are fibrous, not all minerals having fibrous habits are asbestos.

Table 8. Fibrous

Community	Year	Source	Fibrous
Regulatory	1995	International Organization for Standardization, 1995, ISO 10312 Ambient air-determination of asbestos fibres-direct-transfer transmission electron microscopy method (1st ed): Geneve, Switzerland, International Organization for Standardization, 51 p.	(fibrous structure) A fibre, or connected grouping of fibres, with or without other particles.
Regulatory	1996	Colorado Air Quality Control Commission, 1996, Part B-emission standards for asbestos, <i>excerpted from</i> Regulation No. 8 "The control of hazardous air pollutants": Colorado Department of Public Health and Environment, 114 p.	NA
Regulatory	1997	Crane, D., 1997, Asbestos in air: Occupational Safety and Health Administration Method # ID-160.	NA
Regulatory	1997	NYCRR (New York Code of Rules & Regulations) Title 10 Section 73.1	NA
Regulatory	2001	Environmental Protection Agency Part 763-Asbestos Subpart E--Asbestos-Containing Materials in Schools (7-1-01 Edition)	NA
Regulatory	2001	Environmental Protection Agency Part 763-Asbestos Subpart E--Asbestos-Containing Materials in Schools Appendix A (7-1-01 Edition)	NA
Regulatory	2001	29 CFR 1910.1001	NA
Regulatory	2001	30 CFR 56.5001	NA
Regulatory	2001	17 CCR (California Code of Regulations) 93105	NA
Regulatory	2001	West Virginia Code 16-32-2	NA
Regulatory	2002	OAR (Oregon Administrative Rules) 340-248-0010	NA
Regulatory	2002	105 ILCS (Illinois Compiled Statutes Schools) 105/3	NA

Table 9. Parting

Community	Year	Source	Parting
Industrial	1975	Winson, R.W., 1975, Asbestos, <i>in</i> , Industrial minerals and rocks (nonmetallics other than fuels): New York, N.Y., American Institute of Mining, Metallurgical, and Petroleum Engineers, Inc., p. 379-425.	NA
Industrial	1981	Steel, E. and Wylie, A., 1981, Mineralogical characteristics of asbestos <i>in</i> Riordon, P.H. ed, Geology of Asbestos Deposits, Society of Mining Engineers, p. 93-100.	NA
Industrial	1998	Virta, R.L., 2002, Asbestos: U.S. Geological Survey Open File-Report 02-149, 35 p.	NA
Interdisciplinary	1974	Thompson, C.S., 1974, Discussion of the mineralogy of industrial talcs: U.S. Bureau of Mines Information Circular 8639, p. 22-42.	NA
Interdisciplinary	1978	Zoltai, Tibor, 1978, History of asbestos-related mineralogical terminology: National Bureau of Standards Special Publication 506, p. 1-18.	NA
Interdisciplinary	1979	Chatfield, E.J., 1979, Measurement of asbestos fibres in the workplace and in the general environment <i>in</i> Ledoux, R.L., Mineralogical techniques of asbestos determination: Mineralogical Association of Canada Short Course, v. 4, p. 111-157.	NA
Interdisciplinary	1980	Dixon, W.C., 1980, Applications of optical microscopy in analysis of asbestos and quartz, <i>chap 2 of</i> Dollberg, D.D. and Werstuyft, A.W., eds., Analytical techniques in occupational health chemistry: Washington, D.C., American Chemical Society, p. 13-41.	When a mineral breaks along a plane of structural weakness it exhibits parting.
Interdisciplinary	1980	Clark, R.L., 1982, MSHA standard method for fiber identification by electron microscopy: National Bureau of Standards Special Publication 619, p. 207-210.	NA

Table 9. Parting

Community	Year	Source	Parting
Interdisciplinary	1980	Lee, R.J., Kelly, J.F., and Walker, J.S., 1982, Considerations in the analysis and definition of asbestos using electron microscopy: National Bureau of Standards Special Publication 619, p. 132-137.	NA
Interdisciplinary	1980	Chatfield, E.J. and Lewis, G.M., 1980, Development and application of an analytical technique for measurement of asbestos fibers in vermiculite: Scanning Electron Microscopy, p. 329-340.	NA
Interdisciplinary	1984	National Research Council, 1984, Asbestiform fibers-nonoccupational health risks: Washington D.C., National Academy Press, p. 25-47.	NA
Interdisciplinary	1984	Cossette, M., 1984, Defining asbestos particulates for monitoring purposes <i>in</i> Levadie, B. ed., Definitions for asbestos and other health-related silicates: ASTM Special Technical Publication 834, p. 5-49.	NA
Interdisciplinary	1984	Ross, M., Kuntze, R.A., and Clifton, R.A., 1984, A definition for asbestos <i>in</i> Levadie, B. ed., Definitions for asbestos and other health-related silicates: ASTM Special Technical Publication 834, pp.139-147.	NA
Interdisciplinary	1988	Skinner, H.C., Ross, M., and Frondel, C., 1988, Asbestos and other fibrous materials: New York, N.Y., Oxford, 204 p.	NA
Interdisciplinary	1990	Mossman, B.T., Bignon, J., Corn, M., Seaton, A., and Gee, J.B.L., 1990, Asbestos-scientific developments and implications for public policy: Science, v. 247, p. 294-301.	NA
Interdisciplinary	2000	The American Heritage® Dictionary of the English Language, Fourth Edition Copyright © 2000 by Houghton Mifflin Company.	NA

Table 9. Parting

Community	Year	Source	Parting
Interdisciplinary	2000	Wyllie, A.G., 2000, The habit of asbestiform amphiboles: implications for the analysis of bulk samples <i>in</i> Beard, M.E. and Rooks, H.L., eds., Advances in environmental measurement methods for asbestos: ASTM Special Technical Publication 1342, p. 53-69.	Structural defects produce planes of weakness called parting
Interdisciplinary	2001	Beard, M.E., Crankshaw, O.S., Ennis, J.T., and Moore, C.E., 2001, Analysis of crayons for asbestos and other fibrous materials, and recommendations for improved analytical definitions: Research Triangle Park, North Carolina, Research Triangle Institute, Center for Environmental Measurements and Quality Assurance, Earth and Mineral Sciences Department, [informal report], 23 p., plus appendices A-H.	NA
Interdisciplinary	2001	Nolan, R.P., Langer, A.M., Ross, M., Wicks, F.J., and Martin, R.F., eds., 2001, The health effects of chrysotile asbestos-contribution of science to risk-management decisions: The Canadian Mineralogist Special Publication 5, 304 p.	NA
Medical	1977	Zielhuis, R.L., 1977, Public health risks of exposure to asbestos: Elmsford, N.Y., Pergamon Press Inc., 143 p.	NA
Medical	1979	Langer, A.M., Rohl, A.N., Wolff, M., and Selikoff, I.J., 1979, Asbestos, fibrous minerals and acicular cleavage fragments-Nomenclature and biological properties, <i>in</i> Lemen, R. and Dement, J.M., eds., Dust and disease: Park Forest South, Ill., Pathotox Publishers, p. 1-22.	NA

Table 9. Parting

Community	Year	Source	Parting
Medical	1998	Blake, T., Castranova, V., Schwegler-Berry, D., Baron, P., Deye, G.J., Li, C., and Jones, W., 1998, Effect of fiber length on glass microfiber cytotoxicity: Journal of Toxicology and Environmental Health, v. 54, p. 243-259.	NA
Medical	2001	Ninth Report on Carcinogens, January 2001 http://ehp.niehs.nih.gov/roc/ninth/known/asbestos.pdf	NA
Mineralogical	1914	Dana, E.S., 1914, The system of mineralogy of James Dwight Dana, descriptive mineralogy (6th ed): New York, N.Y., Wiley, p.	...is applied to a separation which is not produced along a plane of minimum cohesion in the lattice but is produced by lamellar twinning, by directed pressure exerted on the crystal, or by oriented inclusions which develop planes of weakness. Parting, in some instances, does not conform to the symmetry requirements of the crystal.
Mineralogical	1977	Campbell, W.J., Blake, R.L, Brown, L.L., Cather, E.E., and Sjober, J.J., 1977, Selected silicate minerals and their asbestiform varieties: U.S. Bureau of Mines Information Circular 8751, 56 p.	The tendency of a crystal or grain to break along crystallographic planes weakened by inclusions or structural defects. Different specimens of the same mineral may or may not exhibit parting. Twinned crystals often part along composition planes, which are lattice planes and therefore, potential crystal faces. Parting is similar to cleavage.
Mineralogical	1979	Campbell, W.J., Steel, E.B., Virta, R.L., and Eisner, M.H., 1979, Relationship of mineral habit to size characteristics for tremolite cleavage fragments and fibers: U.S. Bureau of Mines Report of Investigations 8367, 18 p.	NA
Mineralogical	1980	Bates, R.L., and Jackson, J.A., eds., 1980, Glossary of geology (2d ed.): Falls Church, Va., American Geological Institute, 749 p.	[crystal] The breaking of a mineral along planes of weakness caused by deformation or twinning; e.g. garnet. Cf: cleavage [mineral].
Mineralogical	1982	MacKenzie, W.S., Donaldson, C.H., and Guilford, C., 1982, Atlas of igneous rocks and their textures: New York, N.Y., Wiley, p. 20.	NA
Mineralogical	1987	Dorling, M. and Zussman, J., 1987, Characteristics of asbestiform and non-asbestiform calcic amphiboles: Lithos, v. 20, p. 469-489.	NA

Table 9. Parting

Community	Year	Source	Parting
Mineralogical	1988	Skinner, H.C., Ross, M., and Frondel, C., 1988, Asbestos and other fibrous materials: New York, N.Y., Oxford, 204 p.	NA
Mineralogical	1993	Klein, C. and Hurlbut, C.S., Jr., 1993, Manual of mineralogy (after James D. Dana) (21st ed.): New York, N.Y., Wiley, 681 p.	When minerals break along planes of structural weakness. The weakness may result from pressure or twinning or exsolution; and, because it is parallel to rational crystallographic planes, it resembles cleavage.
Mineralogical	1993	Veblen, D.R. and Wylie, A.G., 1993, Mineralogy of amphiboles and 1:1 layer silicates in Guthrie Jr., G.D. and Mossman, B.T., eds., Health effects of mineral dusts: Reviews in Mineralogy, v. 28, p. 61-137,	Parting refers to approximately planar breakage along planes that are not cleavage planes.
Mineralogical	2001	Virta, R.L., 2001, Some facts about asbestos: U.S. Geological Survey Fact Sheet FS-012-01, 4 p.	NA
Mineralogical	2002	http://webmineral.com/help/Fracture.html	NA
Mineralogical	2002	http://webmineral.com/help/Habits.html	NA
Regulatory	1974	U.S. District Court, district of Minnesota, 5th Division. Supplemental Memorandum. No. 5-72, Civil 19, Appendix 5, May 11, 1974, p. 24	NA
Regulatory	1976	National Institute for Occupational Safety and Health, 1976, Revised recommended asbestos standard: DHEW (NIOSH) Publication No. 77-169, 96 p.	NA
Regulatory	1983	29 CFR 1910.1001	NA
Regulatory	1990	Ohio Administrative Code (OAC) 3745-20-01	NA
Regulatory	1992	Crane, D., 1992, Polarized light microscopy of asbestos: Occupational Safety and Health Administration Method # ID-191.	NA
Regulatory	1992	Occupational Safety and Health Administration, 1992, Preambles IV. Mineralogical Considerations, National Stone Association and American Mining Congress	NA

Table 9. Parting

Community	Year	Source	Parting
Regulatory	1993	Perkins, R.L. and Harvey, B.W., 1993, Method for the determination of asbestos in bulk building materials: U.S. Environmental Protection Agency EPA/600/R-93/116, Office of Research and Development, Washington, D.C.	NA
Regulatory	1993	Occupational Safety and Health Administration, 1993, Better protection against asbestos in the workplace: U.S. Department of Labor Fact Sheet No. OSHA 93-06. Available on the world wide web at http://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=FACT_SHEETS&p_id=144	NA
Regulatory	1995	American Society for Testing and Materials, 1995, Standard test method for microvacuum sampling and indirect analysis of dust by transmission electron microscopy for asbestos structure number concentrations: West Conshohocken, Pa., ASTM 5755-95, 13 p.	NA
Regulatory	1995	International Organization for Standardization, 1995, ISO 10312 Ambient air-determination of asbestos fibres-direct-transfer transmission electron microscopy method (1st ed): Geneve, Switzerland, International Organization for Standardization, 51 p.	NA
Regulatory	1996	Colorado Air Quality Control Commission, 1996, Part B-emission standards for asbestos, <i>excerpted from</i> Regulation No. 8 "The control of hazardous air pollutants": Colorado Department of Public Health and Environment, 114 p.	NA
Regulatory	1997	Crane, D., 1997, Asbestos in air: Occupational Safety and Health Administration Method # ID-160.	NA

Table 9. Parting

Community	Year	Source	Parting
Regulatory	1997	NYCRR (New York Code of Rules & Regulations) Title 10 Section 73.1	NA
Regulatory	2001	Environmental Protection Agency Part 763-Asbestos Subpart E--Asbestos-Containing Materials in Schools (7-1-01 Edition)	NA
Regulatory	2001	Environmental Protection Agency Part 763-Asbestos Subpart E--Asbestos-Containing Materials in Schools Appendix A (7-1-01 Edition)	NA
Regulatory	2001	29 CFR 1910.1001	NA
Regulatory	2001	30 CFR 56.5001	NA
Regulatory	2001	17 CCR (California Code of Regulations) 93105	NA
Regulatory	2001	West Virginia Code 16-32-2	NA
Regulatory	2002	OAR (Oregon Administrative Rules) 340-248-0010	NA
Regulatory	2002	105 ILCS (Illinois Compiled Statutes Schools) 105/3	NA

Exhibit 35

US
EPA
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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX

**Response to the November 2005 National Stone, Sand & Gravel Association
Report Prepared by the R.J. Lee Group, Inc
“Evaluation of EPA’s Analytical Data from the El Dorado Hills Asbestos
Evaluation Project”**

April 20, 2006



United States Environmental Protection Agency Region 9
Response to the November 2005 National Stone, Sand & Gravel Association report
prepared by the R.J. Lee Group, Inc:
“Evaluation of EPA’s Analytical Data from the El Dorado Hills
Asbestos Evaluation Project”

This document constitutes the United States Environmental Protection Agency Region 9 (EPA Region 9) response to the major findings and conclusions of the National Stone, Sand & Gravel Association report “Evaluation of EPA’s Analytical Data from the El Dorado Hills Asbestos Evaluation Project” prepared by the R. J. Lee Group (R. J. Lee Report). A more detailed analysis will be completed after additional information is received from the R. J. Lee Group and the National Stone, Sand & Gravel Association,¹ and the United States Geological Survey (USGS).

The R. J. Lee Report draws conclusions that are contradicted by the El Dorado Hills data and by generally accepted scientific principles for measuring asbestos exposure.

Overview

The R. J. Lee Group review of the EPA data was contracted by the National Stone, Sand & Gravel Association. The El Dorado County Office of Education funded the three reviewers who wrote letters in support of the R. J. Lee Report and whose reviews are included in this response.

The EPA Region 9 El Dorado Hills Naturally Occurring Asbestos Exposure Assessment was designed to measure the exposures to asbestos fibers, if any, that resulted from sports and play activities that disturbed dust and soil. EPA Region 9 adhered to accepted EPA standards for sampling and analysis, including rigorous quality assurance/quality control, and to the standard methodologies of EPA exposure and risk assessment.

The R. J. Lee Report Criticizes EPA Region 9 for Using Established Scientific and Public Health Protocols - In assessing naturally occurring asbestos exposures in El Dorado Hills, EPA evaluated asbestos exposures using the PCME (phase contrast microscopy equivalent) asbestos fiber size classification. The PCME classification was used because human epidemiological studies, which form the basis of knowledge of asbestos health effects, measured asbestos fiber concentrations using phase contrast microscopy (PCM) analytical methods. PCME is the standard term for fibers counted by more modern analytical methods that are of equivalent size to those fibers that would be seen by PCM analysis, and includes fibers with a length to width aspect ratio of 3 to 1 or greater. EPA considered PCME fibers in our analysis of the El Dorado data to be consistent with the existing health databases and risk assessment

¹On March 9, 2006, EPA Region 9 sent a letter to the R.J. Lee Group and the National Stone, Sand, & Gravel Association asking for additional information to support the findings and conclusions of the R.J. Lee Report.

procedures used by EPA, California EPA (Cal/EPA), the World Health Organization, and other federal agencies and international organizations. This approach was rejected by the R.J. Lee Group, which instead advocates use of asbestos fiber definitions which are not health based or supported by the majority of experts in the health community, and which would not allow comparison to the existing epidemiologic data on asbestos related cancers.

The R. J. Lee Report Claims that EPA Region 9 Misapplied Fiber Counting Protocols - The R. J. Lee Report claims that EPA Region 9 inflated the fiber counts in the El Dorado Hills air data by misapplying the International Standards Organization (ISO) method 10312 (the analytical method used by EPA to analyze the El Dorado air samples) and including PCME structures with a 3 to 1 length to width aspect ratio in our analysis. The R. J. Lee Report maintains that EPA should only have counted structures which met the general 5 to 1 aspect ratio fiber size definition described in the body of the ISO 10312 method. However, Annex C and Annex E of the ISO 10312 method specifically authorize the counting of PCME structures with a 3 to 1 aspect ratio. Another example of misleading information is the R.J. Lee Report's statistical evaluation and resulting conclusions regarding the concentrations of asbestos structures detected in the EPA air samples. All of the established EPA, National Institute of Occupational Safety and Health (NIOSH), and ISO analytical methods require the counting of asbestos bundles, recognizing the significance of bundles to proper characterization of asbestos fiber levels. The R.J. Lee Report did not include asbestos bundles in its analysis of the data, thereby undercounting the number of structures.

The R. J. Lee Report Claims that EPA Region 9 Misidentified Amphibole Minerals - The R. J. Lee Report concludes that EPA misidentified actinolite asbestos fibers in the El Dorado soil samples by using inappropriate extinction angle criteria. The R. J. Lee Group conclusion is contradicted by the National Institute of Standards and Technology (NIST) and the major analytical methods used for analysis of asbestos in soil and bulk samples. The R. J. Lee Report also cites an unpublished 1980 draft report to support its contention that structures found in the EPA air samples are not asbestos, and ignores a subsequent 1981 published report by the same author that actually supports the EPA approach.

The R. J. Lee Report Applies a Geologic Definition rather than a Public Health Definition to Characterize Microscopic Structures - The R. J. Lee Report relies heavily on the geologic distinction between asbestos fibers and cleavage fragments of the same dimensions, with the implication that exposure to cleavage fragments is benign and of little or no health significance. For the purposes of public health assessment and protection, EPA makes no distinction between fibers and cleavage fragments of comparable chemical composition, size, and shape. The EPA Region 9 approach, which is supported by most public health agencies and scientists, as well as the American Thoracic Society, is based on the following: (1) The epidemiologic and health studies underlying EPA and Cal/EPA cancer risk assessment methods were based on exposures to both cleavage fragments and fibers, and were unable to distinguish between the two, (2) The most recent panel of experts to review asbestos risk assessment methods, the 2003 Peer Consultation Panel convened by EPA, concluded that "it is prudent at

this time to conclude equivalent potency [of cleavage fragments and fibers] for cancer,”² (3) No well-designed animal or epidemiological studies have adequately tested the hypothesis that cleavage fragments with the same dimensions as a fiber are benign or that the human body makes any distinction, (4) Studies that purport to show that cleavage fragments are benign are questioned by many asbestos health experts, (5) There are no routine asbestos air analytical methods, including those used by EPA, NIOSH, the Mine Safety and Health Administration (MSHA), the American Society for Testing and Materials (ASTM), and ISO which differentiate between cleavage fragments and crystalline fibers on an individual fiber basis.

The R. J. Lee Report’s “Virtual” Review of EPA Region 9’s Air Samples is Inconsistent with Established Laboratory Practices - The R.J. Lee Group did not have access to EPA’s actual air samples, nor did it collect any air samples of its own. Rather it reviewed limited pictures and spectra data of a small number of EPA’s air samples and drew conclusions based on those representations. Such a virtual review is not consistent with the National Voluntary Laboratory Assurance Program (NVLAP) quality assurance procedures nor the verification methods of the National Institutes of Standards and Technology.

Federal Courts Have Supported EPA - Many of the assertions of the R. J. Lee Report are consistent with positions that the R.J. Lee Group took as an expert witness for W.R. Grace in the Libby, Montana litigation. In this litigation, the written opinions of the District and Appeals courts, while not specifically addressing the opinions of the R.J. Lee Group, rule in favor of EPA and expressly hold that EPA’s experts and science are credible.³

Background

In October 2004, the EPA Region 9 Superfund site assessment program conducted an assessment of exposures to naturally occurring asbestos (NOA) in El Dorado Hills, California. Specifically, EPA Region 9 simulated the sports activities of children and adults at three schools and a community park and, using personal air monitors, measured asbestos levels in the breathing zones of participants. EPA Region 9 also collected samples of ambient air in the area of the sampling at the same time the simulations were conducted to serve as reference samples. The personal activity-based samples were then compared to the reference samples. The Asbestos Hazard Emergency Response Act (AHERA)⁴ regulation Z-test for statistical

²USEPA (U.S. Environmental Protection Agency) (2003). Report on the Peer Consultation Workshop to Discuss a Proposed Protocol to Assess Asbestos-Related Risk, Final Report. Office of Solid Waste and Emergency Response, Washington D.C. Page viii.

³ See U.S. v. W.R. Grace, 280 F Supp 2d 1149 (2003); U.S. v. W.R. Grace, 429 F. 3d 1224, 1245 (9th Cir. 2005) (Although debate regarding testing methodology and data analysis is “exceedingly complex”, EPA did not ignore accepted scientific principles)

⁴The Asbestos Hazard Emergency Response Act (AHERA) was passed by Congress in 1986 to provide for the inspection and mitigation of asbestos in school buildings. Regulations implementing the Act were promulgated by EPA in 1987.

significance was applied to determine whether there were any statistically significant differences between the personal exposure samples and the ambient reference samples. EPA Region 9 collected over 400 air samples and generated over 7000 data points. All of EPA Region 9's analyses were conducted by accredited laboratories using recognized methods and procedures with strict quality assurance control, including blind performance samples to check analytical accuracy.

Amphibole asbestos, which many health scientists consider to be even more toxic than chrysotile asbestos, was found in almost all the reference and activity-based samples. Of the 29 different sets of activity-based scenario measurements, application of the Z-test determined that personal exposures from 24 scenarios were significantly elevated over the reference samples. Most importantly, the data showed that children and adults participating in sports activities in areas where asbestos occurs naturally in the surface soils, as it does in El Dorado Hills, can be exposed to asbestos fibers of health concern at up to 62 times the corresponding reference levels.

EPA Region 9 released the data from the assessment in May 2005 and held a public meeting in El Dorado Hills that was attended by more than 1000 members of the public. From the outset of the assessment, EPA Region 9 made clear to the community that EPA's only intent was to gather data on potential exposures. The community and the State and local regulatory agencies could then use the information to make decisions about the significance of those exposures and determine appropriate control measures. Both EPA Region 9 and the Agency for Toxic Substances and Disease Registry (ATSDR) have informed the community that exposure levels are a main determinant of the risk of developing asbestos-related cancers and non-cancer diseases, and that reducing the exposures reduces the risk. Consistent with its intent, EPA Region 9 has actively engaged the State and local regulatory agencies to improve naturally occurring asbestos mapping, monitoring, dust control, and regulation. El Dorado County has recently adopted more stringent dust control ordinances.

Detailed Comments on the R. J. Lee Report

R.J. Lee Finding #1: "Based on Mineralogy, Sixty-Three Percent (63%) of the Amphibole Particles Identified as Asbestos Fibers can not be Asbestos."

The R. J. Lee Report argues that there is too much aluminum in 63% of EPA Region 9's identified fibers for the fibers to be asbestiform.⁵ In addition, the remaining 37% (sometimes the Report uses 35%) are not asbestos fibers based on their particle dimensions.

EPA Response

Aluminum - Analysis of the EPA Region 9 El Dorado air samples was performed using the International Standards Organization (ISO) method 10312, a state-of-the-art

⁵Asbestiform: Having the form or structure of asbestos.

Transmission Electron Microscope (TEM)⁶ method with energy dispersive spectroscopy (EDS)⁷ that has strict counting rules and characterizes the dimensions and chemistry of every fiber identified by the microscopist. Identification of fiber type was performed according to the general guidelines of the International Mineralogical Association (IMA) (Leake, 1997)⁸, the international standard for amphibole nomenclature. This same approach for asbestos classification is recommended in the “Research Method for Sampling and Analysis of Fibrous Amphibole in Vermiculite Attic Insulation”, EPA 600/R-04/004, January 2004, and was one of the tools used by Meeker et al (2003)⁹ to determine the composition and morphology of amphiboles from Libby, Montana.

The R. J. Lee Report claims that 63% of the amphibole fibers identified by the EPA laboratory¹⁰ as actinolite asbestos have concentrations of total aluminum that are too high to form asbestos fibers. According to page 2 of the R. J. Lee Report, “Particles with more than 0.3 aluminum atoms pfu [per formula unit] or about 1.5 percent Al₂O₃ cannot form in the asbestos habit due to crystal lattice constraints.” To support its argument, the R. J. Lee Report cites three references. However, on close examination, two of the three references do not agree with the upper threshold limit that the R.J. Lee Group puts on total aluminum content (Leake et al, 1997) (Deer, Howie and Zussman, 1997)¹¹. The third reference (Verkouteren & Wylie, 2000)¹² draws its conclusions on examination of a

⁶Transmission Electron Microscopy (TEM) produces images of a sample by illuminating the sample with an electron beam in a vacuum, and detecting the electrons that are transmitted through the sample.

⁷Energy Dispersive Spectroscopy (EDS) uses measurement of the energy and intensity of X-rays generated when a selected area of a sample is irradiated with an electron beam to identify the mineralogical composition of a structure.

⁸B.E. Leake et al (1997). Nomenclature of Amphibole: Report of the Subcommittee on Amphiboles of the International Mineralogical Association, Commission on New Minerals and Mineral Names. American Mineralogist, Volume 82, pages 1019-1037.

⁹G.P. Meeker et al (2003). The Composition and Morphology of Amphiboles from the Rainy Creek Complex, Near Libby, Montana. American Mineralogist, Volume 88, pages 1955-1969.

¹⁰In this document, the terms “EPA laboratory” and “EPA Region 9 laboratory” refer to the private laboratories that conducted the analysis of the EPA soil and air samples under contract to EPA Region 9.

¹¹W.A. Deer, R.A. Howie, and J. Zussman (1997). Rock-Forming Minerals: Double Chain Silicates, Vol 2, second edition, p 137 - 145.

¹²J.R. Verkouteren and A.G. Wylie (2000). The Tremolite-Actinolite-Ferro-Actinolite Aeries: Systematic Relationships Among Cell Parameters, Composition, Optical Properties, and

small set of fibrous actinolite asbestos samples which the authors partition into asbestos and fibrous “non-asbestos” byssolite using criteria which the IMA specifically recommends against, and which is inconsistent with all standard asbestos analytical methods. Perhaps most important is the fact that all three references agree that it is the IMA criteria which primarily govern the general classification of amphibole type, not the total aluminum content. These references therefore actually support the classification approach taken by the EPA laboratory.

The R.J. Lee Group did not have access to the EPA air samples to conduct their own analyses. Instead, the R.J. Lee Group looked at a limited number of photographs of the recorded EDS spectra. Interferences by other elements in the sample can affect the aluminum total in the spectra. This is especially important because the EPA samples were of air releases from soil, not processed asbestos material. Soils contain non-asbestos mineral and biological particles that can influence element totals in an EDS spectrum, most notably clay particles, which are high in aluminum. The laboratory used by EPA Region 9 identified aluminum-rich actinolite asbestos, by applying the IMA classification guidelines to its direct analysis of the actual sample.¹³

Particle Dimension - As previously stated, the R. J. Lee Report claims that 37% of the fibers counted by EPA in the El Dorado Hills air samples are not asbestos fibers based on their particle dimensions. The report claims that EPA Region 9 inflated the fiber counts by including asbestos structures which do not meet the definition of a fiber as described in ISO 10312. The general ISO 10312 method requires the counting of every asbestos structure with a length to width aspect ratio of 5:1 or greater. As directed by Region 9, the EPA laboratory counted structures with a 3:1 or greater aspect ratio. The R. J. Lee Report states that EPA erred in counting structures with aspect ratios less than 5:1. **Annex C and Annex E of the ISO method clearly authorize the counting of PCME structures with a 3:1 aspect ratio if the data are to be used for exposure or risk assessment purposes, the stated goal of the El Dorado Hills assessment. In fact, the ISO method contains numerous references to PCME fibers. PCME fibers are defined as fibers greater than 5 microns in length, and 0.25 to 3 microns in width with a 3:1 aspect ratio.¹⁴ PCME fibers form the basis for EPA’s IRIS toxicity database and the asbestos risk models of California EPA and other federal and international organizations.¹⁵**

Habit, and Evidence of Discontinuities. American Mineralogist, 85, p. 1239 - 1254.

¹³Personal communication with John Harris, Lab/Cor, January 2006.

¹⁴World Health Organization (1986). Environmental Health Criteria 53, International Programme on Chemical Safety, Asbestos and Other Natural Mineral Fibres, section 2.3.2.2.

¹⁵The IRIS asbestos cancer inhalation unit risk, a measure of asbestos cancer potency, is based on the EPA 1986 Airborne Asbestos Health Assessment Update (EPA/600/8-84/003F; 1986). Cal/EPA used a similar approach and data sets to derive its cancer unit risk. Both the IRIS and the Cal/EPA cancer potency values rely on human epidemiological studies that were conducted using phase contrast microscopy (PCM) analytical methods (some were midget

The R.J. Lee Group also manipulates its statistical analysis of the El Dorado Hills air data by ignoring counts of asbestos fiber bundles in its evaluations. Bundles are two or more attached parallel asbestos fibers which can have a significant health impact when they are inhaled and separate into individual fibers. Bundles were counted in the historical epidemiological studies which form the basis of our knowledge of asbestos-related health effects and EPA's IRIS database. **All of the established EPA, NIOSH, and ISO analytical methods require the counting of asbestos bundles, recognizing the significance of bundles to proper characterization of asbestos fiber levels.**

The R. J. Lee Report further states that EPA's data inflated the asbestos fiber count by ignoring the Agency's own "definition" of asbestos. To support this claim, the R.J. Lee Report cites the glossary of "Method for Determination of Asbestos in Bulk Building Materials", EPA 600/R-93/116, 1993, which states, in part, "With the light microscope, the asbestiform habit is generally recognized by the following characteristics: Mean aspect ratios ranging from 20:1 to 100:1 or higher for fibers longer than 5 microns." The building material analytical method is designed to detect commercially processed asbestos in items like floor tiles, roofing felts, paper insulation, paints, and mastics, not naturally occurring asbestos on air filters or in soil samples. To present the 20:1 aspect ratio for commercial grade asbestos as a universal EPA policy, and to advocate its use as an appropriate standard for analyzing air samples of naturally occurring asbestos is inappropriate and contradictory to use of the PCME dimensional criteria as a tool for assessing exposure risk.

The R. J. Lee Report also states that the diffraction pattern analyses produced by the EPA laboratory for the El Dorado Hills air samples demonstrates that the particles identified by the laboratory are not asbestos.¹⁶ The report cites a 1980 unpublished draft study by S.J. Ring to support its conclusion. The R. J. Lee Report does not mention a 1981 published article by the same author which revises the findings such that they no longer support the conclusion of the R. J. Lee Report and, in fact, support the data produced by

impinger data converted to PCM counts) that could not distinguish fibers that were 5 microns in length or less. PCM cannot distinguish between fibers and cleavage fragments. PCM is not as powerful as current Transmission Electron Microscope (TEM) methods (400X vs 20,000X) as TEM can see the thinner/shorter fibers. However, since EPA's (and Cal/EPA's) toxicity database relies on human health studies that used PCM, current EPA risk procedures use the more powerful TEM method but report the PCM equivalent (PCME) fibers and only use the PCME counted fibers in a risk assessment. This is because the IRIS asbestos file specifies that only PCME fiber counts be used with inhalation unit risk for risk calculation. See also the reference cited in footnote 11.

¹⁶Diffraction pattern analyses irradiates a sample with x-rays and then takes an x-ray photograph.

EPA.¹⁷

R.J. Lee Finding #2: “The Laboratory Procedures did not Comply With the NVLAP Quality Assurance Standard.”

The R. J. Lee Report says that the false positive rate in our air samples was 35% when the acceptable limit in the National Voluntary Laboratory Accreditation Program (NVLAP) is 10%.

EPA Response

The laboratories used by EPA Region 9 for analysis of the El Dorado Hills air and soil samples are accredited through the National Voluntary Laboratory Accreditation Program (NVLAP). NVLAP is administered by the National Institute of Standards and Technology, a non-regulatory agency within the U.S. Commerce Department. A large part of the accreditation process involves on-site audits performed by NVLAP-certified inspectors who review laboratory operational and quality assurance compliance parameters, including documentation proving compliance with NVLAP requirements for verification analyses. A laboratory must demonstrate that all analysts reporting data meet the false negative and false positive requirements set forth by NVLAP before an accreditation certificate is issued. To make a determination that a laboratory did not comply with NVLAP verification standards would require a very detailed examination of all laboratory generated raw data, project specific information, such as a site-specific EPA issued Quality Assurance Project Plan, laboratory instrument log books, and other data and information not supplied in an analytical report. Interviews with the laboratory manager, quality assurance manager, and involved analysts are also mandatory to make judgement on a laboratory’s possible non-compliance. The R.J. Lee Report’s conclusion that the EPA laboratory was not in compliance with NVLAP, based on a cursory review of count sheet and other limited data without the in-depth examination detailed above, is therefore invalid and cannot be used to question EPA’s analytical results.

EPA chose NVLAP-accredited laboratories for the El Dorado Hills assessment as a minimum quality requirement. For supplemental quality assurance, the laboratories were subjected to on-site audits performed by EPA’s Quality Assurance Technical Support group, and both laboratories were sent performance evaluation samples prior to analysis of the El Dorado samples. In addition, the laboratory conducting the air sample analysis was sent double blind performance evaluation samples during the sampling event. In all cases, the laboratories successfully identified the amounts and types of asbestos present on the blind samples within acceptable limits. Further, the El Dorado Hills air and soil data were validated by a third party in accordance with standard EPA quality assurance

¹⁷S.J. Ring (1981). Identification of Amphibole Fibers, Including Asbestos, Using Common Electron Diffraction Patterns. In Russell P.A. and Hutchings A.E. (Eds), Electron Microscopy and X-ray Applications to Environmental and Occupational Health Analysis, Vol. 2:175-198, Ann Arbor Science Publ., Inc.

procedures and were found to be acceptable for all uses.

R. J. Lee Finding #3: “The Soil Samples do not Demonstrate the Presence of Amphibole Asbestiform Minerals.”

The R. J. Lee Report states that the actinolite asbestos fibers identified in the El Dorado Hills soil samples contain too much aluminum to be asbestiform and that the extinction angles of the fibers indicate that they are non-fibrous cleavage fragments. The R.J. Lee Group’s analysis of 23 split soil samples from EPA’s October 2004 sampling event found no asbestos in the samples.

EPA Response

Aluminum - The R. J. Lee Report states that the aluminum content of the fibers in the soil samples was too high to be asbestiform actinolite and that it was indicative of non-asbestiform actinolite and another amphibole, hornblende, which contains approximately 10-20% by weight Al_2O_3 (5.3-10.6% by weight aluminum). Both the laboratory performing EPA’s El Dorado soil sample analysis and the laboratory which analyzed the EPA air samples noted significant quantities of hornblende in the samples, but did not count or report those particles as asbestos. Please see the EPA response to Finding #1 for a further discussion of the aluminum issue.

Extinction Angles - The extinction angle of a fiber evaluated by polarized light microscopy is one of many criteria used to identify mineralogical composition. The extinction angle for amphibole asbestos fibers is the difference in degrees between the long axis of the fiber and the angle at which the fiber optically disappears (the polarization direction where the light passing through it becomes “extinct”) when the fiber is rotated under a polarized light microscope. The R.J. Lee Report states that amphibole asbestos fibers have a zero-degree extinction angle and that non-asbestos cleavage fragments have non-zero extinction angles. Therefore, because the EPA soil sample analysis reported extinction angles which, according to the R.J. Lee Group, averaged 12°, the report alleges EPA incorrectly identified cleavage fragments as asbestos fibers.

The R.J. Lee Report’s conclusion regarding extinction angles is contradicted by the National Institute of Standards and Technology (NIST) and the major analytical methods used for analysis of asbestos in soil and bulk samples. NIST certifies and provides Standard Reference Materials (SRM) for laboratory instrument calibration and laboratory accuracy measurement. The NIST Tremolite/Actinolite SRM 1867A is a special set of three samples certified by NIST to be of ultra-high purity tremolite, actinolite, and anthophyllite asbestos and is considered the “gold standard” for asbestos analytical laboratories. The material is rigorously characterized and is accompanied by a six-page document that describes the properties of each sample. It is required that all analytical laboratories accredited by NIST/NVLAP have the material in their possession and that they use it to calibrate their operations and to test their analysts. The NIST SRM

1867A certificate which accompanies the samples of tremolite and actinolite states that the reference tremolite can have an extinction angle of up to $16.6 \pm 0.3^\circ$ and that the actinolite can have an extinction angle of up to $15.9 \pm 0.2^\circ$. When the EPA laboratory processed the NIST actinolite standard in the manner of the El Dorado Hills soil samples, the extinction angles of the fibers in the processed standard sample were consistent with allowed maximum extinction angles for tremolite/actinolite asbestos ($\sim 10^\circ$ to 20°) and the extinction angles of the fibers seen in the EPA soil samples.¹⁸

Further, the laboratory methods of EPA, NIOSH, and other agencies for analysis of asbestos in bulk material all state that tremolite-actinolite asbestos fibers may have zero (parallel) or *non-zero* (inclined or oblique) extinction angles. EPA Method 600/R-93/116¹⁹, the standard method used by all NIST/NVLAP accredited laboratories to test building materials for the presence of asbestos, states in Table 2-2, Optical Properties of Asbestos Fibers, that tremolite-actinolite asbestos has extinction “parallel and oblique (up to 21°).” NIOSH Method 9002²⁰, the method used for analysis of the El Dorado Hills soil samples, states directly that actinolite and tremolite fibers exhibiting inclined extinction are to be considered asbestos. The method further states that “If anisotropic fibers are found (during PLM analysis), rotate the stage to determine the angle of extinction. Except for tremolite-actinolite asbestos which has oblique extinction at 10 - 20° , the other forms of asbestos exhibit parallel extinction... Tremolite may show both parallel and oblique extinction.”²¹

R.J. Lee Finding #4: “The ISO 10312 Analytical Method can not Distinguish Between Asbestos Fibers and Non-Asbestos Cleavage Fragments.”

The R.J. Lee Report states that the ISO 10312 method contains the disclaimer that “The method cannot discriminate between individual fibers of asbestos and non-asbestos analogues of the same amphibole material,” and, therefore, EPA inflated the asbestos air concentrations by counting “cleavage fragments.”

EPA Response

The ISO 10312 method cannot differentiate between fibers and cleavage fragments with

¹⁸M. Bailey (2006). Identification of Asbestiform Tremolite/Actinolite. Naturally Occurring Asbestos Workgroup Meeting Presentation.

¹⁹USEPA (U.S. Environmental Protection Agency) (1993). Method for the Determination of Asbestos in Bulk Building Materials. EPA Method 600/R-93/116.

²⁰NIOSH (National Institute for Occupational Safety and Health) (1992). Asbestos (Bulk) by PLM.. Method 9002 (Issue 2).

²¹NIOSH (National Institute for Occupational Safety and Health) (1992). Asbestos (Bulk) by PLM.. Method 9002 (Issue 2). Qualitative Assessment, Item c, page 4.

the same dimensions and chemical composition. No routine analytical method has a protocol for distinguishing fibers from cleavage fragments on an individual particle basis. Additionally, from a health standpoint, there is no evidence that supports making the distinction.

Cleavage fragment is a geologic term which refers to structures that form when non-fibrous forms of asbestos minerals split along crystallographic planes, as opposed to asbestos fibers which form from crystalline growth. The R.J. Lee Report maintains that there is a toxicological difference between asbestos structures which formed as fiber crystals and fibers which formed by cleavage plane separation. Page 3 of the R.J. Lee Report states that cleavage fragments are “not known to produce asbestos-like disease.” **It is the position of EPA, the U.S. Centers for Disease Control and Prevention, Agency for Toxic Substances and Disease Registry (ATSDR) and National Institute for Occupational Safety and Health (NIOSH), and the American Thoracic Society, among others, that microscopic structures of amphibole and serpentine minerals that are asbestiform and meet the size definition of PCM fibers, should be counted as asbestos, regardless of the manner by which they were formed.** There are four reasons why the health agencies have taken this position: (1) The epidemiologic and health studies underlying EPA, and California EPA, cancer risk assessment methods were based on exposures to both cleavage fragments and fibers, but were unable to distinguish between the two, (2) The most recent panel of experts to review asbestos risk assessment methods, the 2003 Peer Consultation Panel convened by EPA, concluded that “it is prudent at this time to conclude equivalent potency [of cleavage fragments and fibers] for cancer,”²² (3) No well-designed animal or human epidemiological studies have been conducted to date to test the hypothesis that cleavage fragments with the same dimensions of a fiber are benign, or that the human body makes any distinction, and studies that purport to show that cleavage fragments are benign are questioned by many asbestos health experts,²³ (4) There are no routine air analytical methods, including those used by EPA, NIOSH, the Mine Safety and Health Administration (MSHA), the American Society for Testing and Materials (ASTM), and the ISO which differentiate between cleavage fragments and crystalline fibers.

²²USEPA (U.S. Environmental Protection Agency) (2003). Report on the Peer Consultation Workshop to Discuss a Proposed Protocol to Assess Asbestos-Related Risk, Final Report. Office of Solid Waste and Emergency Response, Washington D.C. Page viii.

²³Both Addison (Addison J, Davies LST. 1990. Analysis of amphibole asbestos in chrysotile and other minerals. Ann Occ Hyg, Apr;34(2):159-75) and members of the U.S. EPA 2003 Peer Consultation panel raised concerns about interpretation of the Davis study (Davis JM, McIntosh C, Miller BG, Niven K. 1991. Variations in the carcinogenicity of tremolite dust samples of differing morphology. Ann NY Acad Sci, Dec;643:473-90), which attempted to compare the toxicity of asbestos fibers and cleavage fragments. These concerns reflected the lack of peer review, use of intra peritoneal injection instead of inhalation exposure, significance of mesotheliomas caused by structures reported as cleavage fragments, purity of the cleavage fragment samples and issues related to fiber dimensions.

In terms of epidemiological data and health outcomes, the cleavage fragment argument is without merit. For the purposes of public health assessment and protection, EPA makes no distinction between fibers and cleavage fragments of comparable chemical composition, size, and shape.

There are no recognized analytical protocols, including those used by EPA, NIOSH, MSHA, ASTM, and ISO, which include criteria to differentiate between cleavage fragments and crystalline fibers. All these methods require that structures which meet their definition of the specific counting rules for an asbestos fiber be counted. The requirements are based on the fact that, in the words of an expert from the United States Geological Survey, “At a microscopic level, distinguishing between these forms on single [asbestos] particles, can be extremely difficult to impossible.”²⁴ As noted above, R.J. Lee made a very similar claim with regard to cleavage fragments as the expert witness for W.R. Grace in the Libby, Montana, Superfund cost recovery litigation. The EPA analytical experts who reviewed the R.J. Lee Group’s testing methodology related to the Libby site found that the R.J. Lee laboratory could not demonstrate any reliable criteria with which to distinguish, at the microscopic level, asbestos cleavage fragments from asbestos fibers of the same size, shape, and composition. The Ninth Circuit Court of Appeals recognized the competing scientific arguments but found that EPA’s position was consistent with the record of evidence and accepted scientific principles.²⁵

R.J. Lee Finding #5: “Applying the Latest Science and Definitional Techniques, the El Dorado Hills Study Shows no Significant Exposure to the Type of Amphibole Asbestos Fiber Connected To Health Risk.”

The R. J. Lee Report claims that the latest science for measuring the risk posed by asbestos is the Berman-Crump Asbestos Risk Assessment Protocol (“Berman-Crump”) which proposes that amphibole asbestos fibers which are more than 10 microns long and less than 0.5 microns wide (protocol fibers) are the most toxic. Of the 2,386 fibers which the R. J. Lee Report states the EPA laboratory identified, the R.J. Lee Report concludes that only 7 fibers meet the “Berman-Crump” definition. Therefore, the R.J. Lee Group maintains that EPA has overstated the risk from exposure to asbestos fibers in El Dorado Hills.

EPA Response

The “Berman-Crump” protocol that the R.J. Lee Report references is in fact a draft EPA method. EPA had the method reviewed by a peer consultation panel in 2003. The panel made a number of important recommendations that must be addressed before the method can be used for EPA risk assessments. A number of important revisions have been made

²⁴G.P. Meeker, USGS, (2002). Review of Expert Report of R.J. Lee.

²⁵U.S. v. W.R. Grace, 429 F.3d at 1245.

to the draft method since 2003, but at this time the method has not been independently peer reviewed. It will not be adopted by EPA as a risk assessment tool unless and until it passes rigorous internal and external peer review.

The expert peer panel has recommended that the fiber size for the draft EPA risk assessment method be adjusted to include fibers greater than 5 microns in length and up to 1.5 microns in width.²⁶ The change is designed to account for lung deposition of fibers that results when fibers are inhaled through the mouth, and not filtered by the nasal passages. The broadening of the fiber definition to include inhalation by “mouth breathers” is especially relevant to the El Dorado Hills data. Our investigation measured personal asbestos exposures of individuals participating in sports activities, where physical exertion would likely increase breathing through the mouth. **The PCME fibers counted in the EPA air samples are actually consistent with the latest science of EPA, as reflected in the recommendations of the peer consultation panel.** In addition, the EPA peer consultation expert panel recommended that cleavage fragments be treated as any other asbestos fiber of the same morphology and chemical composition.²⁷

EPA Region 9 focused on obtaining an accurate count of PCME structures, consistent with our risk assessment protocols and those of Cal/EPA and other health agencies. The counting rules which EPA set for the laboratory were designed to stop counting when a statistically-significant number of PCME fibers were detected. By concentrating on PCME structures, other fiber size classifications may not have been counted to statistical significance. This may have resulted in under counts of other fiber sizes (e.g. the “Berman Crump” protocol fibers referred to in the R. J. Lee Report). **EPA Region 9's study counted PCME structures so that the data could be directly compared to human health epidemiological studies.** These epidemiological studies form the basis for risk assessment models currently used by EPA, Cal/EPA and other federal agencies and international organizations.

R. J. Lee Report Peer Reviews

The R. J. Lee Report was reviewed by three individuals, although research of one of the individuals was extensively quoted in the report and therefore the independence of the reviewer is debatable. The three reviewers generally agree with the conclusions of the R. J. Lee Report regarding aluminum content, fiber chemistry, cleavage fragments, and extinction angles.

Both the R. J. Lee Report and one of the reviewers support use of the original “Berman-

²⁶USEPA (U.S. Environmental Protection Agency) (2003). Report on the Peer Consultation Workshop to Discuss a Proposed Protocol to Assess Asbestos-Related Risk, Final Report. Office of Solid Waste and Emergency Response, Washington D.C. Page 5-5.

²⁷Ibid, page 5-1.

Crump” protocol and calculate a “Berman-Crump” fiber air concentration of 0.0002 fibers/cubic centimeter, using the EPA fibers which they assert meet the “Berman-Crump” definition. The peer reviewer then compares that concentration with an ambient concentration of 0.0008 fibers/milliliter measured in New York City, and states that the “Berman-Crump” value in El Dorado Hills is extremely low. This comparison is flawed for at least two reasons. Significantly, the New York City numbers are based on fibers counted against a totally different size classification (essentially comparing apples to oranges), but **the reviewer also fails to recognize that a concentration of 0.0002 f/cc translates in the protocol to an increased cancer risk of 1 in 1,000 exposed individuals.** This number is disturbingly high and is outside the acceptable cancer risk ranges of EPA, Cal/EPA, and most other state and federal health agencies.

Conclusions

EPA Region 9 has carefully reviewed the R. J. Lee Report and believes that it makes largely unsupported and incorrect conclusions about the EPA Region 9 El Dorado Hills Naturally Occurring Asbestos Exposure Assessment. EPA Region 9 has asked the United States Geological Survey (USGS) to conduct an independent study of the El Dorado County area to address several mineralogical questions raised by the R. J. Lee Report. The USGS study will use sophisticated analytical techniques (such as electron probe micro analysis) to more completely characterize the naturally occurring asbestos in terms of mineral identification and particle morphology.

All of the EPA Region 9 work in El Dorado Hills was, and continues to be, consistent with the EPA’s standard operating and quality control procedures for asbestos work throughout the country.